SCOTTISH FOREIGN TRADE TOWARDS THE END OF THE PRE-INDUSTRIAL PERIOD, 1700-1760

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THESIS CONTAINS

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Declaration

This is to declare that the present PhD thesis has been composed by myself. It is my own work and it has not been submitted for any other degree or professional qualification previously.

Berlin 13 January 2006

Philipp Roessner

In memoriam Volker Heinz Rößner, *6 September 1941, † 9 December 1991

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Philipp Rössner

Abstract

The present thesis examines the trends, structure and fluctuations in Scotland's foreign trade, 1700-1760 in two parts. Whilst **Part I** is a general discussion of Scotland's trade, the commodity trades with *Germany* will be examined *en detail* in Part II, being a case study of what can be achieved using an eclectic variety of Scottish and other north-western European records in a synoptic view. The analysis commences (*chapter 2*) with a detailed examination of the institutional framework ("English Restoration Customs System", 1660) that became applicable in Scotland in 1707, in particular a description of the newly introduced customs system and the duties charged, as well as the change in the level of taxation in 1707 and subsequent alterations. With regard to the detailed examination of the Scottish trade volume in chapters 4-6, a particular look will also be taken at the relevance and responsibility of the institutional super-structure for discouraging certain branches of economic activity and thus creating or at least co-determining a particularly Scottish pattern of overseas trade, 1700-1760. *Chapter 3* consists of a detailed analysis of the scope and reliability of the available quantitative sources. Particular attention will be directed at the Scottish customs accounts, which are unique in an eighteenth century (North-western) European context. The technical analysis of the customs accounts will be supplemented by an analysis of the available post-1755 trade statistics, as well as a detailed examination of the match between information contained in the former and the port books for the first year in which both are preserved completely (1755). This discussion will be supplemented by an analysis of other previously unused Customs materials. *Chapter 4* examines the composition of the Scottish trade volume in 1707, as well as the most probable trajectory for commercial fluctuations between 1707 and 1755. Some insights into the possible distribution of the Scottish trade volume across ports after 1707 will be presented. The broad discussion will be augmented by an analysis of select branches of the commodity trades, which can be captured slightly more reliably from contemporary statistics, such as the colonial trades, the wine, as well as the grain trades. This analysis is followed by an examination of two unrecorded trades – trade with England and tea smuggling – which both attained significantly large dimensions in total Scottish commercial activity, and which have been so far overlooked by scholars. *Chapter 5* takes up the analysis in chapter 4 by providing a concise overview on the composition of the Scottish trade volume in 1754-1760. *Chapter 6* draws Part I to a close by examining possible links between trade and economic growth, as well as the role trade played for the Scottish economy. In the end the peculiar eighteenth-century Scottish trade pattern will be explained. **Part II** is an en detail examination of Scotland's trade with the German Empire in the period under consideration. Drawing on both Scottish and German customs accounts, the commodity trades will be the subject of discussion in *chapter 7*. *Chapter 8* traces the commercial patterns of individual merchants. The main aim of this chapter is to highlight the European contingency matrix of commodity markets, exchange rates and payments mechanisms, which Scots merchants were exposed to, which they had to consider in their business decisions, and which determined the overall profit levels in the intra-European trades.

1 Introduction

1.1 Hypotheses

The present thesis examines the trends, structure and fluctuations in Scotland's foreign trade, 1700-1760 in two parts. Whilst Part I is a general discussion of Scotland's trade, the commodity trades with Germany will be examined *en detail* in Part II, being a case study of what can be achieved using an eclectic variety of Scottish and other north-western European records in a synoptic view. The main sources used in the analysis are the Scottish customs accounts ("port books", 1742-1760), the inspector general's trade statistics (ledgers of imports and exports, 1755-1760), as well as accounts and statistics relating to particular commodities (wine, grain) or fiscal purposes (Customs General Accounts). The analysis in the second part of the thesis also draws on German records, mainly the customs accounts of Hamburg and Bremen, Germany's largest overseas ports in the period.

The main hypothesis put forward in the following is that Scotland's trade in the period rested upon three pillars, which at select points in time attained similar dimensions in value terms: (1) The colonial or re-export trades, which expanded since 1736; (2) the "traditional" trade with England, which expanded at a similar rate and in 1760 still surpassed the colonial trades in value terms; and finally (3) the smuggling trades, mainly in tobacco and tea. All three branches of commerce attained similar dimensions in value terms in the 1750s still, which considerably hampers a definite assessment as to which would prove the most dynamic in the end, i.e. would have the largest positive stimulus on the domestic economy in the period under consideration.

The second hypothesis is that the predominance of tobacco in Scotland's total exports and imports *overseas* needs to be viewed as a result of the taxation system (English customs system), which was superimposed upon a small traditional economy (chapters 2, 3) whose export sector was decidedly weak (chapter 6). During the entire period under consideration Scotland's *overseas* trade was an entrepôt trade, marked by a ratio of re-exports to total exports well in excess of 50 per cent, and

accordingly a small ratio of retained imports to total imports. Re-exports in turn were dominated by tobacco. This very peculiar composition of the Scottish overseas trade volume needs some explanation, because a predominance of the tobacco trades in eighteenth-century Scottish overseas commerce is usually taken as a given. This, however, begs the question as to why exactly Scottish overseas trade after 1707, when Scotland's commercial preconditions were equalized to English trading opportunities by the inclusion into the English colonial system, was *over-dominated* by the tobacco trades, whilst England's trades, subject to very similar cyclical fluctuations, for instance were not. Traditional accounts claim that the rise of Scotland's entrepôt trades was the result of a comparatively short and safe route from south-western Scotland to the tobacco colonies, as well as an increasingly sophisticated business organization and purchasing system operated by the Glaswegian tobacco merchants after c.1740.[1] This explanation, however, tackles the issue from an essentially micro-economic view, taking the institutional change in 1707, in combination with a geographical constant, as given, whilst almost entirely disregarding these trades' wider institutional and macro-economic contingency matrix. The explanation offered here instead, as a supplement to the traditional accounts, is that a 100 per cent drawback of customs duties paid upon import, a possibility that was enjoyed by no other commodity listed in the contemporary Books of Rates but tobacco, codetermined the rise of a spectacular warehousing business with a bias towards tobacco, in an economy that had not much to offer in terms of domestic products, in order to either successfully compete on world markets, or balance a growing demand for imports.

The third hypothesis (chapters 4, 5) cannot claim to be particularly original, as it is merely a restatement of an opinion formulated in a similar form more than two hundred years ago. It is suggested here that modern research has unduly played

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1 J. M. Price, "The Rise of Glasgow in the Chesapeake Tobacco Trade, 1707-1775," in: *WMQ*, II (1954), pp. 179-199; Id., "A Revolution of Scale in Overseas Trade: British Firms in the Chesapeake Trade, 1675-1775," in: *JEcH*, XLVII (1987), pp.1-43. T. M. Devine, *The Tobacco Lords. A Study of the Tobacco Merchants of Glasgow and their Trading Activities 1740-1790* (Edinburgh, 2nd ed., 1990), ch. 4. I. W. Stevenson, "Some Aspects of the Geography of the Clyde Tobacco Trade in the Eighteenth Century," *The Scottish Geographical Magazine*, LXXXIX (1973), pp. 19-35.

down Adam Smith[2] and under-appreciated the English link in terms of its weight in eighteenth-century Scottish total foreign trade and perhaps chances of development.[3] Whilst the absence of reliable quantitative sources capturing Anglo-Scottish trade post-1707 does not permit a full discussion of the problem, it will be suggested that Scotland's *overseas* trade statistics only capture about 50 to 60 per cent of her total trade at best. The remainder was trade with the old rival to the south, which continued to thrive after 1707, as much as it had in the six previous decades (chapters 4-5). As late as 1765, exports to England of cattle and linen, in value terms surpassed imports from and exports to the American colonies, as well as re-exports of tobacco, sugar and rice from Scottish ports to European destinations ("the colonial trades"). These primary and low value-added secondary goods accurately reflected Scotland's stage of economic development and comparative advantage. The abolition of customs duties upon cross-border traffic in 1707 further stimulated this development, which had been in place before that date. Again, the change in the institutional superstructure in 1707 is the key to the problem.

A fourth hypothesis (chapter 4) may be advanced by stating that whilst the dimensions of the illegal market in tobacco are reasonably well-researched, the illicit *tea* trades, which have almost completely evaded scholarly attention as yet, attained monetary dimensions similar to the legal and illegal tobacco trades after 1740. Taking tea and tobacco together, and adding illicit trading activities in spirits and other non-essentials such as Indian textiles, all of which prevailed in eighteenth-century Scotland, this yields the third pillar of Scottish commercial activity in the period: trade through the black market sector. A taxation system (English customs system 1660/1707) that either employed tax rates well in the excess of 240 per cent of the products' prime cost (tobacco), or which monopolized the importation of certain non-essentials to certain channels (tea), led to retail prices quoted for legally

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2 Adam Smith somewhat narrowly emphasized the role of the cattle trades to England for eighteenth-century Scottish development, disregarding other commodities sent from Scotland to England. His statement will be modified by adding sheep, linen, coal, as well as some other commodities, which can be asserted, to the picture and stressing the weight of the English link in general.

3 T. M. Devine, "The Union of 1707 and Scottish Development," *Scottish Economic and Social History*, V (1985), pp. 23-40, reprinted Id., *Exploring the Scottish Past. Themes in the History of Scottish Society* (East Linton, 1995), pp. 37-53, at p. 45.

traded items, that were far in excess of what this economy could bear. Accordingly, alongside a flourishing re-export business, this also caused the rise of a black market sector in Scotland whose dimensions were spectacular. Evidence will be presented below, which suggests that the tea business attained considerable dimensions after 1707, approaching or matching Scotland's colonial trades, as well as the English link in value terms.

Thus the institutional superstructure that changed for Scotland with the customs union in 1707 in fact linked back into every three of the pillars of Scotland's subsequent commercial activity: it co-determined rise of the legal re-export trades to continental European destinations, facilitated by a 100 per cent draw-back of customs duties on re-export; it facilitated the expansion of the traditional trades to Scotland's main market by the abolition of customs duties on Anglo-Scottish trade; and it co-determined the spectacular rise of the black-market sector. All these commercial activities experienced rapid growth after circa 1736/40.

The fifth hypothesis (chapter 6) concerns the role trade played for the Scottish economy in the period. Whilst a discussion of Scotland's macro-economic trajectory, 1700-1760 is not the subject of the present work, it will nevertheless have to be factored into the analysis as a sub-text (chapter 6), in particular since scholars have identified some sectors of the Scottish economy which experienced rapid output growth that was partly or even fully trade-led, most notably linen and tobacco, since c.1740.[4] Firstly, it is proposed here that trade remained tiny in terms of its relation to total economic activity, i.e. the Scottish economy was neither particularly open nor export-led in the period. This applies quite regardless of whether or not the English link, (the second "pillar" of commerce, see above paragraph) is included into the discussion. Secondly, as scholars have pointed out with regard to *Ireland*, the context of a small economy being part of the economic and political periphery that was dominated by the core (England) might, due to the economic power of the dominating economy, easily have led to economic under-development via trade in

4 Id., "Scotland" in R. Floud and P. Johnson (eds.), *The Cambridge Economic History of Modern Britain,* Vol.1. *Industrialisation, 1700-1860* (Cambridge, 2004), pp. 388-416, esp. pp. 396-399, p. 402f.; Id., "The Modern Economy: Scotland and the Act of Union" in Id. and C. H. Lee and G. C. Peden (eds.), *The Transformation of Scotland. The Economy Since 1700* (Edinburgh, 2005), pp. 13-33, esp. pp. 21-30.

the long run.[5] Interestingly, the Scottish case did in fact closely resemble the Irish example, c. 1700-1760, with a dominance of cattle and coarse linen in terms of exports to England (see above). The hypothesis can be re-stated in the following terms: as late as 1760 Scotland's chances – in terms of her economic structure, as well as per capita income growth trajectory since 1700 – of becoming an "under-developer" were about as high as they had been in 1700.

The sixth hypothesis (chapter 6) – or, given the scope of the present work, sub-text – is but a refinement and result of the preceding assumption: there was no economic growth in Scotland, 1700-1760, and per capita income levels actually declined, 1740-1760. This hypothesis is also significant for the reference framework chosen, in particular the chronological and applicable economic framework for analysis (1700-1760). It has been most aptly suggested that the Scottish economy was "on the move" since about 1740 or 1750[6] (reserving to the reader the decision into which direction), and that the tobacco and linen trades played a role in this process. There seems in fact to be a slight historical paradox: output indices for some economic variables, such as linen output and exports, as well as tobacco imports, were indeed experiencing an exponential increase from c. 1740 onwards. Real wages and per capita agrarian output and consumption levels on the other hand declined since 1700, but more rapidly between 1740 and 1760 than between 1700 and 1740. There is the obvious question: which of these index figures has to be regarded as a key economic indicator, i.e. has the highest correlation coefficient with the development in per capita national income? Which of these branches of economic activity can be identified as a "leading sector"? It will be proposed that in the period under consideration neither the linen nor the tobacco trades, clearly Scotland's most dynamic sectors in the period,[7] managed to offset an unambiguously negative trend in per capita national income, as borne out by prices for essentials and nominal

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5 T. M. Devine, "The English Connection and Irish and Scottish Development in the Eighteenth Century" in Id. and D. Dickson (eds.), *Ireland and Scotland 1600-1850* (Edinburgh, 1983), pp. 12-130, reprinted in T. M. Devine, *Exploring the Scottish Past. Themes in the History of Scottish Society* (East Linton, 1995), pp. 54-73. In the Irish case, the weaker or subordinate partner in the long run was "degraded" to a supplier of primary goods to the more powerful economy, which at the end of the period had industrialized whilst the dependent partner would remain an agrarian economy to-day.

6 T. M. Devine, *The Scottish Nation. A History 1700-2000* (New York, 1999), p. 105.

7 See sources referred to in n. 4.

wages (chapter 6). In fact modern research has made it crystal-clear that the structure of the Scottish economy did not change significantly and an industrial transformation did not commence prior to 1760.[8] Therefore the analysis has been deliberately limited to the years 1700 to 1760, as the post-1760 heuristic framework was very different.

A ***seventh hypothesis*** (Part II, chapters 7, 8) can be advanced with regard to adding a European dimension to Scottish overseas trade, mainly by stating that early modern Scottish trade was – contrary to what the statistics suggest – not normally bilateral. Profit levels and business decisions in Scotland's overseas trade were, on top of comparative advantage due to differential labour cost or factor endowment levels, contingent upon many other factors, such as European commodity markets, exchange rates and payments mechanisms. Viewing trade in an isolated way, i.e. examining "the colonial trades", "Scottish trade with Ireland", "Scottish trade with Germany", or "the tobacco trades", "the linen trades", "the rice trades" etc., in a sense distorts the analytical quality of the conclusions, as the larger Scottish merchants of their time might be (and in fact mostly were) involved in either of these branches, frequently at the same time, often even within the same venture (i.e. ship's itinerary) for which an account was kept.

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8 Devine, "Scotland"; "Modern Economy". This seems to be a typical phase in the last stage of a pre-industrial economy preparing for a subsequent economic transition: a growing surplus population, which is already considerably large and responsible for considerable levels of under- and disguised (mainly agricultural) unemployment, will constantly depress real wage (and thus income) levels, as prices for cereals increase vis-à-vis stagnant or declining nominal wages. The latter will *stimulate* the initial expansion of the non-agrarian sector which is reliant on wage labour. The overall result, however, will depend upon which weight industry and commerce have in total national income, vis-à-vis agriculture. Here it will be argued that this share was arguably low, thus failing to offset the negative trends in per capita consumption and real incomes until 1760 at least.

1.2 State of Research

Obviously the present analysis has to build upon what research in the past has already established. But contrary to the situation of a comparatively excellent endowment with quantitative sources post-1742, especially in terms of information yielded by the customs accounts, a source that has been largely lost in England's case and thus potentially makes for a Scottish "comparative advantage in source endowment", Scottish macro-historiography, either relating to overseas commerce or eighteenth century macro-economic fluctuations in general, has advanced in very careful and short steps.

What regards the general trends, structure and fluctuations in Scotland's volume of trade in the eighteenth century, existing studies have focused on particular commodities, ports, or countries Scotland traded with. The big synopsis is an issue scholars have largely evaded to-day.[9] Surveys have not reached beyond the article or chapter level: remarkable but heavily out of date is the first general discussion in two chapters by Hamilton.[10] Unfortunately, the instructive accounts on trade by Lynch and Stevenson in the *Atlas of Scottish History*[11] finish their analysis in 1700. The accounts on trade in the generalist but rather outdated economic history textbooks on eighteenth century Scotland are limited in scale and scope, which applies *inter alia* to Butt and Lythe[12], Campbell[13], Lenman[14] and Whyte[15].

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9 For earlier centuries this deficiency has been partly compensated for by recent studies: M. Rorke, Scottish Overseas Trade 1275/86-1597 (Unpubl. Univ. of Edinburgh PhD thesis, 2 vols., Edinburgh, 2001); I. Blanchard, "Northern Wools and Netherlands Markets at the Close of the Middle Ages" in G. G. Simpson (ed.), *Scotland and the Low Countries 1124-1994* (East Linton, 1996), pp. 76-88; D. Ditchburn, "Trade with Northern Europe, 1297-1540" in M. Lynch, R. M. Spearman and G. Stell (eds.), *The Scottish Medieval Town* (Edinburgh, 1988), pp. 161-179; Sections on Trade in P. G. B. McNeill and H. L. MacQueen (eds.), *Atlas of Scottish History to 1707* (Edinburgh, 1996), pp. 238-283; A. Stevenson, "Trade with the South, 1070-1513" in Lynch et al. (eds), *Medieval Town*, pp. 180-206.

10 H. Hamilton, *An Economic History of Scotland in the Eighteenth Century* (Oxford, 1963), chs. IX, X.

11 McNeill & MacQueen, *Atlas*.

12 S. G. E. Lythe and J. Butt, *An Economic History of Scotland, 1100-1939* (Glasgow - London, 1975), ch. IX.

13 R. H. Campbell, *Scotland since 1707. The Rise of an Industrial Society* (Edinburgh, 2nd revised ed., 1985), ch. III.

14 B. Lenman, *An Economic and Social History of Modern Scotland 1660-1976* (London, 1975).

It should be noted that until very recently, earlier centuries had not been served well either. Model studies for the mediaeval period by Rorke[16] and for the early seventeenth century by Watson[17] came in the wake of a handful of rather pioneering articles in the 1980s, which for the first time used quantitative evidence (customs accounts) for their analysis. These were *inter alia* Blanchard[18], Ditchburn[19], Lynch and Stevenson[20] and Stevenson.[21] Obviously these studies were overdue, as one pioneering edition of England's customs accounts, by that time was already old.[22] Generally speaking, trade, being a sub-sector within the inhomogeneous tertiary or service sector of the economy, should ideally be dealt with in a macro-economic perspective. Without doubt in that regard the 1960s appear as a watershed, as English economic historiography became quantitative since that date, i.e. more interested in pinpointing the overall and long-term quantitative framework (trends and fluctuations), rather than discussing trade purely on the basis of institutional aspects and non-quantitative accounts. Unfortunately, this tendency never reached north of the English Border. Exemplary English exercises in the field, such as the classical works by Davis[23] and Schlote[24], are either absent or exist, but do not quite match the analytical level of the studies available for England.[25] And at their time pioneering

15 I. D. Whyte, *Scotland before the Industrial Revolution. An Economic and Social History c1050 – c1750* (London - New York, 1995), esp. pp. 301-307. Id., *Scotland's Society and Economy in Transition, c.1500-c.1760* (Basingstoke - London - New York, 1997).

16 Rorke, Scottish Overseas Trade; Id., "English and Scottish Overseas Trade, 1300-1600," *EcHR*, Second Series, LIX, 2 (2006), pp. 265-288.

17 J. C. Watson, Scottish Overseas Trade, 1597-1645, 2 Vols. (Unpubl. University of Edinburgh PhD Thesis, Edinburgh, 2005).

18 Blanchard, "Northern Wools".

19 Ditchburn, "Trade".

20 McNeill & MacQueen (eds.), *Atlas*, pp. 238-283.

21 Stevenson, "Trade".

22 E. M. Carus-Wilson and O. Coleman, *England's Export Trade 1275-1547* (Oxford, 1963).

23 R. Davis, "English Foreign Trade, 1660-1700," in: *EcHR*, Second Series, VI (1954), pp. 150-166; Id., "English Foreign Trade, 1700-1774," in: *EcHR*, Second Series, XV (1962), pp. 285-303.

24 W. Schlote, *Entwicklung und Strukturwandlungen des englischen Aussenhandels von 1700 bis zur Gegenwart* (Jena, 1938). Engl. translation: *British Overseas Trade. From 1700 to the 1930s* (Oxford, 1952).

25 Hamilton, *Economic History*, chs. IX, X is an exception, as in a way is T. C. Smout, "Where Had the Scottish Economy got to by the Third Quarter of the Eighteenth Century?" in I. Hont and M. Ignatieff (eds.), *Wealth and Virtue. The Shaping of Political Economy in the Scottish Enlightenment* (Cambridge, 1983), pp. 45-72. The following textbooks on Scottish economic history touch trade only briefly, tentatively and largely inconclusively: Lythe & Butt, *Economic History*, ch. IX; Campbell, *Scotland*, ch. III; Lenman, *Economic and Social History*; Whyte, *Scotland*, esp. pp. 301-307; Id., *Scotland's Society and Economy*.

editions of information contained in English customs accounts and contemporary trade statistics have not yet been repeated for Scotland.[26] Instead, scholars working on Scotland have chosen to pursue a particularistic approach (by commodities, countries, ports and merchants).

Tobacco has been dealt with to an excessive degree, far outweighing its factual macro-economic significance.[27] As none of these works has normally paid particular attention to the demand side of this business (i.e. the continental European markets), the present work will *inter alia* close part of this gap, drawing attention to American tobacco and sugar sent from Scottish ports to Hamburg and Bremen (Part II of the present thesis). General surveys of *sugar, rum* and other colonial re-export goods are still lacking. *Timber* has been dealt with by Scandinavian historians, but with a focus on the seventeenth century.[28] Overseas markets for Scottish *linen*, as well as the dominant role of Irish and German linen amongst re-exports to the British colonies in America, have been briefly discussed in what needs to be seen as the definitive study of the Scottish linen industry in the eighteenth century.[29] Even commodity trades of rather mediocre macro-economic significance, such as *fish*[30] and *books*[31], have received scholarly interest. Whilst not denying these commodities their possible

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26 Carus-Wilson & Coleman, *England's Export Trade*; E. B. Schumpeter, *English Overseas Trade Statistics, 1697-1808* (Oxford, 1960). "Guides" to the immensely rich (and in the eighteenth century richer than England) Scottish statistical materials have likewise not been produced. G. N. Clark, *Guide to English Commercial Statistics 1696-1782* (London, 1938).

27 Price, "Rise of Glasgow"; as well as his article collections: Id., *The Atlantic Frontier of the Thirteen American Colonies and States. Essays in Eighteenth Century Commercial and Social History* (Aldershot, 1996); Id., *Tobacco in Atlantic Trade. The Chesapeake, London and Glasgow 1675-1775* (Aldershot, 1995); Id., *Overseas Trade and Traders. Essays on Some Commercial, Financial and Political Challenges Facing British Atlantic Merchants, 1660-1775* (Aldershot, 1996); Devine, *Tobacco Lords*; Stevenson, "Geography of the Clyde Tobacco Trade".

28 S. E. Åström, "North European Timber Exports to Great Britain, 1760-1810" in P. L. Cottrell and D. H. Aldcroft (eds.), *Shipping, Trade and Commerce. Essays in Memory of Ralph Davis* (Leicester, 1981), pp. 81-98; A. Lillehammer, "The Scottish-Norwegian Timber Trade in the Stavanger Area in the Sixteenth and Seventeenth Centuries" in T. C. Smout (ed.), *Scotland and Europe, 1200-1850* (Edinburgh, 1986), pp. 97-111. Id., "Boards, Beams and Barrel-hoops: Contacts between Scotland and the Stavanger Area in the Seventeenth Century" in G. G. Simpson (ed.), *Scotland and Scandinavia 800-1800* (Edinburgh, 1990), pp. 100-106.

29 A. J. Durie, *The Scottish Linen Industry in the Eighteenth Century* (Edinburgh, 1979); Id., "The Markets for Scottish Linen, 1730-1775," in: *SHR*, LII, 1 (1973), pp. 30-49.

30 R. Harris, "Scotland's Herring Fisheries and the Prosperity of the Nation, c.1660-1760," *SHR*, LXXIX, 1: Nr. 207 (April 2000), pp. 39-60; R. J. Coull, *The Sea Fisheries of Scotland. A Historical Geography* (Edinburgh, 1996).

31 A. J. Mann, *The Scottish Book Trade, 1500-1720* (East Linton, 2000).

regional and cultural significance, in terms of the macro-level, they verge on the edge of the insignificant, not just vis-à-vis the absence of a general study of Scotland's overseas trades, but also and in particular the absence of convincing macro-economic histories of eighteenth century Scotland.[32]

The particularistic approach has also been chosen for studies on particular ***ports***. Evidence on local trading patterns has been produced in the shape of articles or chapters within monograph studies for places such as Aberdeen[33], Dundee[34], Glasgow[35] and Montrose.[36] Coherent geographical areas (regional economies) and their trade have been studied in the case of Shetland[37] and "the West."[38] Two existing studies on the port of Leith and Ayr are inadequate in terms of their usability for the economic historian, as they largely refrain from a systematic and quantitative discussion of these ports' trades.[39]

A third sub-category of the "particularistic" approach would obviously be comparative studies of Scotland with particular ***countries***. There is only one monograph by Cochran in this field which, as the same language, customs practices and a similar political super-structure are concerned, can hardly be called "comparative".[40] Studies such as Cochran's would be desirable for trade with *Holland*, the *Baltic* and the *Scandinavian* countries. The present author has already contributed to this field in terms of Scottish trade with German ports in the

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32 N. F. R. Crafts, *British Economic Growth during the Industrial Revolution* (Oxford, 1985); L. A. Craig and D. Fisher, *The European Macroeconomy. Growth, Integration and Cycles 1500-1913* (Cheltenham - Northampton, 2000), which contains several chapters on England.

33 G. Jackson, "The Economy: Aberdeen and the Sea," in: E. P. Dennison and D. Ditchburn and M. Lynch (eds.), *Aberdeen Before 1800. A New History* (East Linton, 2002), pp. 159-180.

34 C. A. Whatley, D. Swinfen and A. M. Smith, *The Life and Times of Dundee* (Edinburgh, 1993).

35 G. Jackson, "Glasgow in Transition, c.1660 to c. 1740" in T. M. Devine and G. Jackson (eds.), *Glasgow.* Vol. 1. *Beginnings to 1830* (Manchester - New York, 1995), pp. 63-105; and T. M. Devine, "The Golden Age of Tobacco," ibid, pp. 139-183.

36 G. Jackson and S. G. E. Lythe (eds.), *The Port of Montrose: A History of its Harbour, Trade and Shipping* (Tayport, 1993); therein: I. D. Whyte, "'All Kynds of Graine': the Trade in Victual c. 1680-1825" (pp. 115-124); D. G. Adams, "Trade in the Eighteenth and Nineteenth Centuries" (pp. 125-149).

37 H. D. Smith, *Shetland Life and Trade, 1550-1914* (Edinburgh, 1984).

38 A. Slaven, *The Development of the West of Scotland 1750-1960* (London, 1976).

39 S. Mowat, *The Port of Leith. Its History and its People* (Edinburgh, 1982); E. J. Graham, *The Port of Ayr 1727-1780* (?Darvel?, 1995); T. Barclay and E. J. Graham, *The Early Transatlantic Trade of Ayr 1640-1730* (Trowbridge, 2005), esp. pp. 58-60.

40 L. E. Cochran, *Scottish Trade with Ireland in the Eighteenth Century* (Edinburgh, 1985).

eighteenth century, thus closing at least part of what needs to be seen as a considerable scholarly gap.[41]

A fourth category or possibility of addressing overseas trade in a particular view, are studies on ***particular merchants*** or companies or partnerships of merchants. With the exception of tobacco, such studies are almost completely absent. There is one study on a small merchant active in the early decades of the eighteenth century in Leith, who clearly was a minor player in the game.[42] Jackson's study of the Edinburgh whale fishing company remains an interesting starting point for the larger companies.[43] With regard to firms or partnerships active in the Atlantic trades, Price's article on Buchanan & Simson is still fairly much the starting and the ending point.[44]

Whilst the record relating to Scotland's overseas trades in the eighteenth century might thus be characterized as biased and incomplete, yet immensely rich in isolated aspects, the field is even bleaker in terms of macro-economic histories of eighteenth century Scotland, which is mentioned here for reasons of completeness and in the light of the discussion in chapters 4 and 6.

There are robust studies and surveys on particular branches of Scottish economic activity, such as agriculture[45], industry in general[46], and sub-sectors such

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41 P. R. Roessner, *Scottish Trade with German Ports, 1700-1770. A Study in Early Modern Multilateralism* (Stuttgart, forthcoming).

42 T. McAloon, "A Minor Scottish Merchant in General Trade: The Case of Edward Burd 1728-39" in J. Butt and J. T. Ward (eds.), *Scottish Themes. Essays in Honour of S. G. E. Lythe* (Edinburgh, 1976), pp. 17-27.

43 G. Jackson, "Government Bounties and the Establishment of the Scottish Whaling Trade, 1750-1780" in Butt & Ward (eds.), *Scottish Themes*, pp. 46-66.

44 J. M. Price, "Buchanan & Simson, 1759-1763: A Different Kind of Glasgow Firm Trading to the Chesapeake," *WMQ*, XL (1983), pp. 3-41.

45 R. Dodgshon, *Land and Society in Early Scotland* (Oxford, 1981); T. M. Devine, *The Transformation of Rural Scotland. Social Change and the Agrarian Economy, 1660-1815* (Edinburgh, 1994); Id., "The Transformation of Agriculture: Cultivation and Clearance" in Id., Lee & Peden (eds.), *Transformation*, pp. 71-99; I. H. Adams, "The Agents of Agricultural Change" in M. L. Parry and T. R. Slater (eds.), *The Making of the Scottish Countryside* (London, 1980), pp. 155-175; Id., "The Agricultural Revolution in Scotland: Contributions to the Debate" in A. Cooke, A. MacSween and C. A. Whatley (eds.), *Modern Scottish History, 1707 to the present*, Vol. 3. *Readings 1707-1850* (East Linton, 1998), pp. 83-90; M. L. Parry, "Changes in the Extent of Improved Farmland" in Id. & Slater (eds.), *Countryside*, pp. 178-199; D. Turnock, *The Historical Geography of Scotland since 1707* (Cambridge, 1982); G. Whittington and I. D. Whyte (eds.), *An Historical Geography of Scotland* (London, 1983); G. Whittington, "Agriculture and Society in Lowland Scotland, 1750-1870" in Ibid., pp. 141-164; I. D. Whyte,

as linen[47], woollen manufacture[48], coal mining[49], salt making[50], brewing[51], glass-making[52], paper making[53], and services such as banking[54], to name but a few. It is, however, the macro-aspect and more recently developed trends in economic history which have been severely, and partly even deliberately, disregarded by Scottish historians. Standard textbooks on Scottish economic history are notoriously disagreed on or inconclusive regarding a firm time framework for the long term trends in Scottish per capita national income and changes in Scotland's economic structure, i.e. the Rostovian[55] and post-Rostovian[56] growth stories.[57]

"Early Modern Scotland: Continuity and Change" in Ibid., pp. 119-141; Whyte, *Scotland Before the Industrial Revolution*; Id., *Society and Economy*.

46 R. H. Campbell, *The Rise and Fall of Scottish Industry 1707-1939* (Glasgow, 1980).

47 Durie, "Markets"; Id., "The Scottish Linen Industry in the Eighteenth Century: Some Aspects of Expansion" in L. M. Cullen and T. C. Smout (eds.), *Comparative Aspects of Scottish and Irish Economic and Social History 1600-1900* (Edinburgh, 1977), pp. 88-99; Id., *Linen Industry*; Id., "Textile Finishing in the North East of Scotland 1727-1860" in J. Butt and K. Ponting (eds.), *Scottish Textile History* (Aberdeen, 1987), pp. 1-18.

48 I. Barnes, "The Aberdeen Stocking Trade," *Textile History*, VIII (1977), pp. 77-98; C. Gulvin, "The Union and the Scottish Woollen Industry, 1707-1760," *SHR*, L (1971), pp. 121-137.

49 B. F. Duckham, *A History of the Scottish Coal Industry*, Vol. 1. *1700-1815. A Social and Industrial History* (Newton Abbot, 1970).

50 C. A. Whatley, *The Scottish Salt Industry 1570-1850. An Economic and Social History* (Aberdeen, 1987); Id., *'That Important and Necessary Article'. The Salt Industry and its Trade in Fife and Tayside* c1570-1850 (Dundee, 1984); Id. "Salt, Coal and the Union of 1707: A Revision Article," *SHR*, LXVI, 1: Nr. 181 (April 1987), pp. 26-45; Id., "Sales of Scottish Marine Salt c.1714-1823," *Scottish Economic and Social History*, VI (1986), pp. 4-17.

51 I. Donnachie, *A History of the Brewing Industry in Scotland* (Edinburgh, 1979).

52 J. Turnbull, *The Scottish Glass Industry 1610-1750. 'To Serve the Whole Nation with Glass'* (Edinburgh, 2001).

53 A. G. Thomson, *The Paper Industry in Scotland 1590-1861* (Edinburgh, 1974).

54 S. G. Checkland, *Scottish Banking. A History 1695-1973* (Glasgow / London, 1975); R. Savile, *Bank of Scotland. A History 1695-1995* (Edinburgh, 1996).

55 W. W. Rostow, *The Process of Economic Growth* (New York, 2nd ed., 1962); Id., *Stages of Economic Growth* (Cambridge, 2nd ed., 1971).

56 N. F. R. Crafts et al., "Trends and Cycles in British Industrial Production, 1700-1913," *Journal of the Royal Society*, CLII, Series A (1989), pp. 43-60. N. F. R. Crafts, "English Economic Growth in the Eighteenth Century: A Re-examination of Deane and Cole's Estimates," *EcHR*, Second Series, XXIX (1976), pp. 226-235; Id., "British Economic Growth, 1700-1831: A Review of the Evidence," *EcHR*, Second Series, XXXVI (1983), pp. 177-199; Id., *British Economic Growth during the Industrial Revolution* (Oxford, 1985), and summary in: Id., "The New Economic History and the Industrial Revolution," in: P. Mathias and J. A. Davis (eds.), *The First Industrial Revolutions* (Oxford, 1989), pp. 25-43, esp. at pp. 29-35, Tab. 1-2, Fig. 1.

57 E.g. Campbell, *Scotland*, p. 29 and chs. I-IV in general; Hamilton, *Economic History*, p. 1; C. A. Whatley, *The Industrial Revolution in Scotland* (Cambridge, 1997), p. 20, p. 24. Whyte, *Scotland before the Industrial Revolution*, pp. 328-333; Id., *Society and Economy*, p. 165; Lythe & Butt, *Economic History*, p. 102f., p. 162; Devine, *Nation*, passim; Id., *Transformation*; Id., "Modern Economy".

Studies have appeared for England in the past, such as the now outdated pioneer in its field[58], or the work by Pollard and Crossley contemporaneous to the former[59], which laid the foundation stone of what was to become a central benchmark in writing and interpreting British economic history. These classical works, revised subsequently by Crafts with regard to total economic activity[60] and Harley with regard to industrial output[61], can be viewed as the benchmark against which the Scottish historical output of the recent period ought to be measured. Smout's survey in 1983 represents not only the initial but in fact still the only attempt in that direction.[62] By utilizing a broad set of quantitative data, ranging from trade and excise figures to price series and related qualitative data, Smout pointed out the variety of possible directions for quantitative research into eighteenth century Scottish history, which unfortunately were not implemented by subsequent Scottish historians. Accordingly, there is a dearth of similar macro-studies establishing trends and fluctuations in the Scottish business cycle 1700-1800, which is particularly surprising, as the statistical material (population figures[63], excise accounts[64], linen output[65], prices and wages[66], customs accounts and trade statistics) is in fact available, and in many regards qualitatively and quantitatively even *better* than the English evidence.

Sometimes the absence of such studies for Scotland even received a positive assessment. Houston for instance states that "[t]he economic history of eighteenth-

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58 P. Deane and W. A. Cole, *British Economic Growth 1688-1959. Trends and Structure* (Cambridge, 2nd ed., 1967).

59 S. Pollard and D. W. Crossley, *The Wealth of Britain, 1085-1966* (London, 1968).

60 Crafts et al., "Trends and Cycles"; Crafts, "English Economic Growth"; Id., "British Economic Growth"; Id., *British Economic Growth*; Id., "New Economic History".

61 C. K. Harley, "British Industrialization before 1841: Evidence of Slower Growth during the Industrial Revolution," *JEcH*, XLII (1982), pp. 267-289.

62 Smout, "Where Had the Scottish Economy Got to." England has of course been served well in the classic by Deane & Cole, *British Economic Growth*, esp. pp. 62-75; figures and methods which have been used and revised e.g. in Crafts, *British Economic Growth*.

63 J. G. Kyd (ed.), *Scottish Population Statistics including Webster's Analysis of Population 1755* (Edinburgh, 1952). M. W. Flinn et al., *Scottish Population History from the Seventeenth Century to the 1930s* (Cambridge, 1977).

64 NAS, E551 series and related materials.

65 R. H. Campbell (ed.), *States of the Annual Progress of the Linen Manufacture 1727-1754. From the Records of the Board of Trustees for Manufactures etc., in Scotland preserved in the Scottish Record Office* (Edinburgh, 1964).

century Scotland seems to be much less 'sophisticated' than in England. But, on a more positive note, it never went down the road of rabid quantification and survives in a more humane and approachable form which may make it easier to survive."[67] This avantgardist attitude towards a "humane" form of writing Scottish economic history has until today successfully withstood all potential dangers of a Craftesian invasion; Clio has not made it past the English border. The postulate of one of the editors of the most recent textbook (2005) on Scottish economic history, for "rigorous studies, of the kind which have forced reassessment of the nature and chronology of English industrialisation" and the confession that "[i]ndeed the 'new' economic history in general has had little impact on the study of Scottish history"[68] was, although expressively stated as a desiderate, not adopted as an incentive to remedy this situation.[69]

Playing devil's advocate on the other hand, one can easily maintain that on purely arithmetic grounds quantitative studies of eighteenth-century Scotland alter nothing in terms of British economic fluctuations (there was a United Kingdom since 1707 after all). Quantitative studies on eighteenth-century Scotland might in fact be profoundly superfluous. A nation (Scotland) whose trade levels for instance account for only one-twentieth of her parliamentary incorporated neighbour to the South (England), will alter almost nothing in terms of the aggregate growth rate for the two ("Britain"), which can be fairly reliably approximated by the growth rate of the larger of the two.[70] This attitude has marked research on eighteenth century "British"

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66 A. J. S. Gibson and T. C. Smout, *Prices, Food and Wages in Scotland 1550-1780* (Cambridge, 1995).

67 R. A. Houston, "Eighteenth-Century Scottish Studies: Out of the Laager ?" *SHR*, LXXIII, 1: Nr. 195 (April 1994), pp. 64-81, at p. 79.

68 Devine, "Modern Economy", at p. 14.

69 Devine & Lee & Peden (eds.), *Transformation*, therein: Devine, "Modern Economy"; Id., "Industrialisation" (pp. 34-70); Id., "Transformation of Agriculture".

70 Suppose that English trade amounted to twenty times the Scottish trade volume (as it did in official figures in 1755) and that therefore, England will account for about 95 per cent of the "British" total. Set the two at absolute starting levels of 5 (Scotland) and 95 (England) and assume that Scotland's trade volume increased by a factor of three, 1700-1760 but that the English trade volume only doubled over the period. Then at the end of the period (1760) the result would be 5*3 + 95*2 = 205, yielding a compound growth rate of 1.2 per cent per annum and an overall increase in the "British" total by 105 per cent. This is similar to the English increase (100 per cent or an annual average growth rate of 1.16 per cent), whilst Scotland's trade had grown by 200 per cent (at a much higher annual average (compound) growth rate of 1.85 per

economic growth ever since, including the major revision studies mentioned above by Crafts and Harley, who exclusively relied upon English material as a proxy for their "British" eighteenth-century figures. This approach, however, overlooks that the analytical framework of *British* economic performance in the eighteenth century can be a weak and even a-historical tool, not only for ideological reasons. In terms of economic structure and performance, England was and remained radically different from Scotland in the eighteenth century.[71] England was the first nation to industrialize, had a lower share of her working population employed in agriculture than any other country on the globe, whilst in 1760 the Scottish economy – in terms of per capita income, economic structure, economic performance and stage of development – was still more similar to Norway, Sweden, France and Central Germany than to her southern neighbour. In this regard, the "British" view, if it is approximated using *English* evidence, considerably distorts the historical picture and seriously hampers a balanced understanding of different patterns of development prevailing throughout different regions and nations across Europe. It neglects the fact that not Britain but England underwent the first industrial revolution.

Instead, in order to place Scotland into a more reliable framework for analysis a comparative, northern-European view would be especially useful. Whilst the absence of studies in historical growth accounting in Scottish economic history certainly deserves to be called the more serious deficit, the absence of a *comparative* perspective has also severely hampered Scottish (economic) historiography in terms of the general conclusions, implications and assessment of certain economic and social processes which, in the absence of a strong European perspective, have in places been viewed as "spectacular", "remarkable", or "unique". Partly this might be the result of a recent and fairly unhealthy tendency amongst popular Scottish historians towards favouring a framework that is parochial at best and nationalistic at

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cent). Thus the "British" figure can be approximated by the English figure without having to recur to an examination of Scottish statistics at all. Deane & Cole formulated this pointedly and perhaps somewhat chauvinistically, when referring to a quantitative discussion on British trade, by stating that "[s]ince Scottish trade was only a fraction of English (about 5 per cent in 1755), the effects on the aggregates for Great Britain as a whole can safely be ignored." Deane & Cole, *British Economic Growth*, p. 43, n. 1.

71 Not to speak of perception, culture, society, language, customs etc. pp.

worst. One still finds that views are promulgated which claim that Scotland invented "the modern World"[72], created "the Enlightenment"[73], had an Empire[74] or dominated British policy and London life and by the same token the rest of the orbit, and so forth. Not only did the majority of the north-western European countries undergo transformation and growth processes (such as trade, urbanization, economic growth) at similar rates to the ones observed for Scotland at roughly the same time[75], but also in many cases would have either matched or outperformed Scotland in per capita terms (trade and income levels).

The present work will therefore strive as much as possible to endorse the view that in order to appropriately understand Scottish trade and economic development in the pre-industrial period (1700-1760), the economic experience of other – similar – countries and economies in north-western Europe will have to be added to the picture. By the same token, an unduly narrow focus on England as a benchmark for comparison will likewise be discarded as unsuitable. It is fairly obvious that factoring over-performers (mainly in terms of structural change and expansionary dynamics across the non-agricultural sector) such as England and the Netherlands into a discussion of Scottish economic performance without modification is bound to add a negative bias to Scottish performance.

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72 A. Herman, *How the Scots Invented the Modern World. The True Story of How Europe's Poorest Nation Created Our World & Everything in It* (New York, 2001).

73 Id., *Scottish Enlightenment. The Scots' Invention of the Modern World* (London, 2002).

74 M. Fry, *The Scottish Empire* (East Linton, 2001); T. M. Devine, *Scotland's Empire, 1600-1815* (London, 2003).

75 Craig and Fisher, *Macroeconomy*; J. L. Van Zanten, "Early Modern Economic Growth: A Survey of the European Economy, 1500-1800" in M. Prak (ed.), *Early Modern Capitalism. Economic and Social Change in Europe, 1400-1800* (London - New York, 2001), pp. 69-87.

1.3 Organization of the Argument

The hypotheses stated in 1.1 will therefore be tested as follows. Chapter 2 is concerned with a detailed examination of the institutional framework ("English Restoration Customs System", 1660) that became applicable in Scotland in 1707.[76] Following a bi-partite structure, the two components of relevance for the present analysis are as follows. (a) A description of the newly introduced customs system and the duties charged is necessary for a better understanding of the quantitative sources that are discussed in chapter 3, and which chiefly served fiscal purposes. Therefore the first part of chapter 2 will highlight *inter alia* the duties levied[77], the change in the level of taxation in 1707[78] and subsequent alterations.[79] (b) With regard to the detailed examination of the Scottish trade volume in chapters 4-6, a particular look will also be taken at the relevance and responsibility of the institutional super-structure for (i) discouraging certain branches of economic activity and thus (ii) creating or at least co-determining a particularly Scottish pattern of overseas trade, 1700-1760. Thus the second component of chapter 2 works out the imbalances in the new taxation system, by examining effective net tax rates on selected commodities of particular importance[80], as well as discussing the particular mechanism of the draw-back schedule[81], bonded customs duties and their relevance for the design of the particularly Scottish trading pattern in the period.[82] A brief overview on customing procedures, facilitating the understanding and technical examination of the sources in chapter 3, in particular the customs accounts or "port books", is provided in an appendix.[83]

Chapter 3 consists of a detailed analysis of the scope and reliability of the available quantitative sources. Particular attention will be directed at the Scottish

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76 Ch. 2, section 2.1.
77 Ibid., section 2.1.2.1.
78 Ibid., section 2.1.2.2.
79 Ibid. section 2.1.3.
80 Ibid., section 2.2.1.
81 Ibid., section 2.2.2.
82 Ibid., section 2.2.3.

customs accounts.[84] This is because of two aspects. (i) The present study is the first detailed technical analysis of the customs accounts and their coverage. (ii) Furthermore, the Scottish customs records are unique in an eighteenth century (north-western) European context. Not only are British customs accounts generally the most detailed of their kind available for early modern Europe. But the loss of the London port books, covering about 80 per cent of *England's* foreign trade in the period, also places Scotland into pole position for a historical analysis of commercial fluctuations in a European dimension. The basic difference of British accounts to most other available material for European ports in the period is that, inasmuch as foreign or overseas trade was concerned, *all* traffic and all commodities imported or exported were recorded, regardless whether or not liable to duty. Accordingly the evidence contained in the Scottish customs accounts can be broken down by (α) imports and exports in general, (β) ports / countries, as well as (γ) merchants, ships' captains, supercargoes and forwarding agents involved. This aspect makes these accounts unique, as they allow insights that are largely impossible for other contemporaneous nations and trading points, especially German ports, which will be used for comparison (chapters 3, 7). The technical analysis of the customs accounts will be supplemented by an analysis of the available post-1755 trade statistics[85], as well as a detailed examination of the match between information contained in the former and the port books for the first year in which both are preserved completely (1755).[86] This discussion will be supplemented by an analysis of other previously unused Customs materials. A new methodology of utilising Scottish customs yields evidence (Scottish Board of Customs General Accounts, detailing yields and expenses under the Scottish Customs in an uninterrupted yearly series since 1707/8) will be presented.[87] Given that these accounts are the only quantitative source in yearly series that has completely survived for eighteenth-century Scotland, their value for the following analysis is enormous.

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83 Appendix A 4.
84 Ch. 3, section 3.1.
85 Ibid., section 3.2.
86 Ibid., section 3.2.4.7.
87 Ibid., section 3.3.

Chapter 4 examines the composition of the Scottish trade volume in 1707, as well as the most probable trajectory for commercial fluctuations between 1707 and 1755. It will be shown that this trajectory, whilst largely unknown in specific numerical terms, can nevertheless be reasonably well inferred. Certain numerical benchmarks can be pinpointed by an eclectic use of the source material discussed in chapter 3. Commencing with an analysis of the structure of the Scottish trade volume at the "eve of Union"[88], the import and export trades with England 1696-1707, which are reasonably accurately covered in contemporary statistics, will be analyzed.[89] Some insights into the possible distribution of the Scottish trade volume across ports after 1707 will be presented.[90] This is followed by a discussion of the overall commercial fluctuations and growth rates between c. 1700 and 1760.[91] This discussion will be augmented by an analysis of select branches of the commodity trades, which can be captured slightly more reliably from contemporary statistics, i.e. (i) the colonial trades (tobacco)[92], (ii) wine[93], as well as (iii) the grain trades.[94] The latter will also be taken as an example demonstrating the usability of the available material for a wider discussion of Scotland's eighteenth-century macro-economy in chapter 6.[95] The discussion of the recorded commodity trades is followed by an examination of two unrecorded trades which attained significantly large dimensions in total Scottish commercial activity. The English market for Scottish exports, 1700-1760 will be looked at first, as one important branch of Scotland's legal trades, which however, ceased to be recorded after 1707.[96] The other branch, or part of Scotland's third commercial mainstay, smuggling, will be discussed using evidence on Scotland's *tea* trades, which have largely evaded scholarly examination as yet.[97]

Chapter 5 takes up the analysis of chapter 4 by providing a concise overview on the composition of the Scottish trade volume 1754-1760, using a range of better

88 Ch. 4, section 4.1.1.
89 Ibid., sections 4.1.1.1-2.
90 Ibid., section 4.2.
91 Ibid., section 4.3.1.
92 Ibid., section 4.3.2.1.
93 Ibid., section 4.3.2.2.
94 Ibid., section 4.3.2.3.
95 Ibid., section 4.3.2.3.2., esp. 4.3.2.3.2.4.
96 Ibid., section 4.3.2.5.

and more comprehensive sources.[98] The distribution of the Scottish trade volume in terms of countries traded with[99], and Scottish ports involved in these trades will likewise be examined.[100]

Chapter 6 draws Part I to a close by examining possible links between trade and economic growth, as well as the role trade played for the Scottish economy. The chapter commences with an analysis of the structure of Scotland's trade volume in terms of its potential of causing economic growth[101], followed by an overview on the possible long-term trend in Scotland's per capita national income, 1700-1760[102], as well as a comparison of Scottish commercial and economic performance to other north-western European economies.[103] In the end the peculiar eighteenth-century Scottish trade pattern will be explained.[104]

Part II is an *en detail* examination of Scotland's trade with the German Empire in the period under consideration. Drawing mainly on Scottish and German customs accounts, the commodity trades as covered in contemporary quantitative records will be the subject of discussion in *chapter 7*. This discussion, by analyzing the Scottish-German trade link in terms of its relevance for the present overall argument[105], the general pattern[106], as well as the most significant commodities traded between Scottish and German ports in the period, such as fish[107], Scots salt[108], rice[109], tobacco[110] and German linens[111], will highlight the scope and opportunities for historical analysis provided by the Scottish customs accounts. It is hoped that this will encourage further research into similar branches of Scottish trade, in particular

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97 Ibid., section 4.3.4.
98 Ch. 5, section 5.1.
99 Ch. 5, section 5.2.
100 Ch. 5, section 5.3
101 Ch. 6, section 6.1.
102 Ibid., section 6.2.
103 Ibid., section 6.3.
104 Ibid., section 6.4.
105 Ch. 7, section 7.1.
106 Ibid., section 7.2.
107 Ibid., section 7.3.1.
108 Ibid., section 7.3.2.
109 Ibid., section 7.3.3.
110 Ibid., section 7.3.4.
111 Ibid., section 7.3.5.

given the uniqueness of the Scottish customs material and the variety of conclusions of a wider European nature which are possible on the basis of these records.

Chapter 8 follows up the general discussion by exposing the shortfalls of a purely quantitative or statistically-led discussion of trade. Individual merchants will be discussed, and Scottish-German trade will again be used as *pars pro toto*. The main aim of this chapter is to highlight the European contingency matrix of commodity markets, exchange rates and payments mechanisms, which Scots merchants were exposed to, which they had to consider in their business decisions, and which determined the overall profit levels in the intra-European trades. Based on a selection of merchant papers, such as journals, ledgers and letter books, derived mainly from court cases, a special look will be taken on multilateralism in the European commodity trades in the eighteenth century.[112] Three merchants or firms trading to Germany in the period will be examined. Beginning with the largest firm[113], it will be shown that motivations for and mechanisms of trading to German ports might vary with firm or business size. Two other firms will be considered, i.e. one medium-sized company[114] and one smaller[115] merchant. Some problems relating to the intra-European consignment trade will also be highlighted.[116]

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112 Ch. 8, section 8.1.
113 Buchanan&Simson, ch. 8, section 8.2
114 Ibid., section 8.3.
115 Ibid., section 8.4.
116 Ibid., section 8.4.2.

PART I: SCOTTISH FOREIGN TRADE, 1700-1760

2 The Institutional Superstructure – Theory and Practice of the English Customs System in Scottish Ports, 1707-1783

2.1 The Introduction of the English Customs System in Scotland in 1707

2.1.1 Mayday

As of Mayday 1707, Scotland and England were joined together into one "United Kingdom", which factually cost the Scots their political independence. The social, economic, political and cultural ramifications, causes and consequences of the Union 1707 have been dealt with aptly and *en detail* elsewhere and need no reiteration.[1] The following section will therefore only highlight shortfalls and administrative gaps created by the Union, where these are of relevance for the subsequent discussion of sources (chapter 3) and trading patterns (chapters 4-5).

English customs rates and procedures became generally applicable in Scotland in 1707, with a somewhat surprisingly low number of differing rates and procedures and other exemptions.[2] Given the stage of development and average incomes in

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1 Most recently and comprehensively C. A. Whatley (with D. Patrick), *The Scots and the Union* (Edinburgh, 2006). Unfortunately I have not had the opportunity to incorporate the findings of this important work into the present thesis, as it came out when the argument already stood put and the costs of alterations to the text and notes at appropriate sections would have exceeded the potential benefits. Nevertheless I am inclined to say that this important work of Whatley's does support the present argument unambiguously, especially in chs. 4 and 6.

2 Chiefly relating to the excise on ales and beers which was generally charged at one-third of the applicable English rates. S. West, *The Exciseman's Pocket-Book* [...] (London, 1769), and J. Figgess, *The Excise-Officer's Vade-Mecum* [...] (London, 1781), pp. 66-70. On the political economy of this issue cf. P.-K. O'Brien, "Central Government and the Economy, 1680-1815" in: R. Floud and D. McCloskey (eds.), *The Economic History of Britain since 1700*, Vol. I. *1700-1860* (Cambridge, 2nd ed., 1994), pp. 205-241; Id., "The Political Economy of British Taxation, 1650-1815," in: *EcHR*, Second Series, LXI (1988), pp. 1-32; Id., "Inseparable Connections: Trade, Economy, Fiscal State, and the Expansion of Empire, 1688-1815" in: P. J. Marshall (ed.), *The Oxford History of the British Empire*, Vol. II. *The Eighteenth Century* (Oxford, 1998), pp. 53-77, at pp. 63-70; R. Harris, "Government and the Economy" in: R. Floud and P. Johnson (eds.), *The Cambridge Economic History of Modern Britain*, Vol. I. *Industrialisation, 1700-1860* (Cambridge, 2004), pp. 204-237, esp. pp. 214-225; J. Brewer, *The Sinews of Power. War, Money*

Scotland, the application of English tax rates was not a matter-of-course. Accordingly, and somewhat as compensation, *excise* rates on essentials that were mainly consumed domestically, such as Scots salt and beer, were fixed at lower rates in Scotland than in England.

In many other regards, however, Scotland, although without a parliament and theoretically under remote control from Westminster, remained almost as independent from England as it had been prior to the Union. Suffice it to cite just a few relevant aspects. During the entire eighteenth century and all across Scotland, the £Scots remained in use as a money of account, especially when it came to rents and related transfer payments[3] and certain forms of taxation.[4] There is ample ground to believe that it even retained its character as a real medium of exchange after 1707, as not all old Scots coins were re-minted in 1707/8. A further outright violation of the stipulations and spirit of the Treaty of Union was the retaining of the old Scottish measures of length and capacity, which differed from parish to parish. Apart from standardized measures to be used in customs and excise procedures[5], the old measures continued to be used well into the nineteenth century. But most importantly, pre-industrial Scottish society and economy were marked by a propensity to tax evasion that was without doubt remarkably high. Partly this was a result of a very weak and in many ways rather informal administrative grip.

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and the English State, 1688-1783 (London, 1989); W. J. Ashworth, *Customs and Excise. Trade, Production and Consumption in England, 1640-1845* (Oxford, 2003).

3 In the years preceding the Union, the £Scots exchanged at 1/12 £Sterling. This exchange rate was retained after 1707 for accounting purposes, whenever the £Scots was used. Scots coinage was even briefly re-admitted as legal tender in 1708. It is unclear how many old Scots coins continued to circulate in rural areas after 1707/8. The widespread use of the £Scots as a money of account well into the nineteenth century, however, suggests that a certain amount of the old coins might well have continued to circulate in local exchange. See also R. Savile, *Bank of Scotland. A History 1695-1995* (Edinburgh, 1996), p. 78 and n. 14.

4 NAS, *Trinity House Records,* GD 226/7/1, *Crown Money Book*, passim; GD 226/18/250, GD 229/13/36, *Tables of Shore Dues,* Leith (3rd June 1761 – January 1775, 29th May 1776 – 10th May 1780, January 1788 – 18 January 1827).

5 A. D. Connor and A. D. C. Simpson, *Weights and Measures in Scotland: A European Perspective* (East Linton, 2004); R. E. Zupko, "The Weights and Measures of Scotland before the Union," in: *SHR*, LVI, 2, Nr. 162 (1977), pp. 119-145; I. Levitt and (T.) C. Smout, "Some Weights and Measures in Scotland, 1843," in: *SHR*, LVI, 2, 162 (1977), pp. 146-152, esp. p. 146f., p. 151; J. M. Henderson, *Scottish Reckoning of Time, Money, Weights and Measures* (no date / place of publication indicated), p. 5f. A. Bald, *The Farmer and Corn-Dealer's Assistant* (Edinburgh, 1st ed., 1780).

Prior to 1746 for instance (when the last Jacobite uprising was finally subdued and roads suited for long-distance travel, reaching far into the Highlands were constructed), the arm of the British state, in the shape of customs and excise taxation, did not effectively extend to the Highland region of Scotland at all. There were no *permanent* Customs precincts north-west of Loch Ness (or the line spanning the two customs precincts of Inverness and Fort William, i.e. the Highlands proper).[6] The Customs precinct of Lochbroom with its head- or outport Ullapool, which in theory covered almost the entire Highland area north-west of Loch Ness, was closed in 1747. This closure followed a period of four years of complete inactivity during which the resident customs collector had recorded no taxable – or taxed – incoming or outgoing waterborne traffic whatsoever.[7] But it was by no means the Highlands region alone that frequently and successfully evaded taxation. The level of smuggling in Scotland's overseas trades was remarkable in general (as will be seen below), but particularly high in the south-west (chapter 4). Such was the determination of Scots to successfully withstand the imposition of some excise taxes on essentials. The much-hated malt excise ("Malt Tax") for instance, officially imposed in 1713, could not be levied effectively prior to 1723. Even at that latter date it caused wide-spread public riots in Lowland Scotland. As it fell into a year of macro-economic depression, this was arguably the worst-possible timing for the introduction of a tax on a vital component of the Scots diet.[8] Government during the first half of the century took place largely through informal channels via the Scottish

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6 These customs precincts would in theory have covered the "Highlands & Islands" region, but it seems very unlikely that the grip on and control of seaborne traffic and related economic activity in the Highlands by these rather small Customs Outports would have been a tight one.

7 This was in part due to the closure of the port during the Jacobite rising in 1745/6, when the customs collector left his post for good on the grounds that he – as a British official – feared for his life in an environment that was thoroughly Jacobite. This does not mean that nothing had been traded or produced in the vicinity of Ullapool and the North-western Highlands. NAS, E504/23/1, Customs Accounts Lochbroom (Ullapool), esp. signatures of collector in *permanente absentia*..

8 It is uncertain whether the Malt Tax was levied at all between 1713 and 1723. The General Accounts of the Scottish Excise (NAS, E551/1seq.) do not contain accounts for this levy at all until 1723, but the *abstract account* in NAS, E554/1 covers somewhat hypothetical yields or arrears (liabilities that were not paid) for 1713-23, which were charged ex post from 1723 on, but projected backwards, in gradually increasing steps from near zero (1723). After 1723 the malt tax was charged and levied regularly. A detailed examination of the history and accounting practices of the Scottish excise is still lacking.

"viceroy", the Duke of Argyll and his system of nepotism and patronage.[9] Twenty years after the Union, he (the Duke of Argyll) commented that in Scotland "by a long series of no administration, the mere letter of the law has little or no weight with the people"; i.e. there had been no real *political* administration at all prior to that date.[10]

This situation caused and allowed to sustain a high level of unrecorded economic activity in Scotland, both in domestic production (excise), as well as the overseas trades (customs). A significant share of the population and Scottish economic activity were excluded and thus factually exempt from taxation. Net remits of taxation yields from Edinburgh to London remained tiny in the first five decades after the Union, especially in the Customs.[11] Central bodies of economic administration – such as Treasury and Board of Trade – showed little interest in Scotland in anything that went further than revenue accounting. These aspects had a considerable effect on the amount and coverage of economic statistics that were compiled for Scotland, compared to England and Ireland.[12] Trade statistics, which for Ireland and England had been compiled since 1696, were not produced for Scotland prior to 1755 (and no "British" trade statistics were kept, either after 1707).[13] Those statistics available for Scotland prior to 1755 were mainly concerned with tobacco, wine and grain, commodities in which the state had a slightly higher interest than usual, as these trades were either highly regulated (grain[14]) or taxed at above-average rates of duty (wine, tobacco). With the exception of such

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9 C. A. Whatley, *Bought and Sold for English Gold? Explaining the Union 1707* (East Linton, 2nd ed., 2001); L. Paterson, *The Autonomy of Modern Scotland* (Edinburgh, 1994), esp. p. 24, pp. 31-34. M. Lynch, *Scotland. A New History* (Edinburgh, 8th ed., 1997), chs. 18, 19, esp. pp. 315-319, pp. 323-326.

10 J. S. Shaw, *The Management of Scottish Society 1707-1764. Power, Nobles, Lawyers, Edinburgh Agents and English Influences* (Edinburgh, 1983), p. 86.

11 Around 1707 Scottish Customs yields accounted for circa two per cent of the British totals. Only five per cent of the totals were remitted to London in 1707-1715. R. H. Campbell, "The Anglo-Scottish Union of 1707.II. The Economic Consequences," in: *EcHR*, Second Series, XVI, 3 (1964), pp. 468-477; J. M. Price, "Glasgow, the Tobacco Trade, and the Scottish Customs, 1707-1730," in: *SHR*, LXIII (1984), pp. 1-36, p. 7.

12 See ch. 3 below.

13 The English "ledgers of imports and exports" continued to record only English overseas trade after 1707. See ch. 3 below.

14 Grain *imports* were prohibited by the Corn Laws. These, however could – on the shire level and by an official decree of the Sheriff Court – be waived temporarily in times of dearth when the domestic grain prices (prevailing in the respective shires) surpassed certain thresholds. Depending upon the domestic price, a gliding import tariff became then applicable on grain imports. Grain *exports* could obtain bounties.

commodities, Scottish commercial and economic fluctuations are therefore difficult to establish *ex post* for the first half of the eighteenth century. These problems will be discussed in more detail in chapter 3.

Clearly the Union of 1707 failed to permeate far below the surface level i.e. in terms of creating a "British" economy or society until the 1750s. Scholars have also pointed out that in Scotland the direct economic effects of the Union did not materialize until well after the 1750s.[15] This assessment, however, depends on what the imputed outcome of the 1707 settlement should have been. Its most significant impact in commercial terms was without doubt the creation of a *customs union* with certain modifications (see below) between Scotland and England. It has even been suggested to view the product of the 1707 Treaty as the creation of "the biggest free-trade zone in Europe at that time".[16] Whilst this is incorrect in strictly definitional terms, the formulation is nevertheless helpful in highlighting some key aspects for subsequent Scottish commercial development, in particular the rapid growth of cattle and linen exports to England, as well as the colonial trades. Accordingly historians

15 T. M. Devine, "The Union of 1707 and Scottish Development," in: *Scottish Economic and Social History*, V (1985), pp. 23-40, reprinted in: Id., *Exploring the Scottish Past. Themes in the History of Scottish Society* (East Linton, 1995), pp. 37-53.

16 Id., *The Scottish Nation. A History 1700-2000* (New York, 1999), p. 54. In general, a Free Trade Area (FTA) is defined by tariffs that are waived within the area covered by the agreement *without a* Common External Tariff (CET) being operated by the members of this area. A customs union on the other hand is defined by tariffs waived on traffic between its members, *as well as* a common external tariff operated by the members of the customs union. Therefore the settlement of 1707 did not create a free trade zone, as the English customs system or "empire", including the American colonies and after 1707 Scotland, operated a common external tariff. Strictly speaking the Union of 1707 did not create a perfect customs union either, as *salt* and *coal* (and in theory, also *malt*), two significant commodities for the domestic economy, remained liable to the payment of duty and various commercial restrictions upon cross-border (and even domestic in the case of coal) traffic between Scotland and England after 1707. This was a measure successfully implemented by the negotiators of the Union on the Scottish side – many of whom happened to be owners of coal mines and salt works – in order to protect the hopelessly uncompetitive Scottish coal and salt industries from English competition. Domestically-produced (i.e. either English or Scottish) salt could legally travel between Scotland and England only by sea (land transport was forbidden by forfeiture) and would then be liable to a duty of 2s 4d per bushel in either direction. Technically, malt and herring were also liable to customs if crossing the Anglo-Scottish border after 1707. Cf. 5 *Ann.* c.8, sec. 8, H. Crouch, *A Complete View of the British Customs* [...] (London, 4th ed., 1745), p. 490, 535f.; 11 *Geo* I., c.8 and 12 *Geo* I. c. 4; ECA, CRB, SL30/4/6, Box 1, Bdl. 2, *Rules and Directions for the Better Regulating the Coast Trade, and Preventing Frauds by Ships and Vessels Trading Coastways* (1773). C. A. Whatley, "Salt, Coal and the Union of 1707: A Revision Article," in: *SHR*, LXVI, 1, Nr. 181 (April 1987), pp. 26-45, at pp. 28-32, p. 38. Id., *The Scottish Salt Industry 1570-1850. An Economic and Social History* (Aberdeen, 1987); I. D. Whyte, *Scotland before the Industrial Revolution. An Economic and Social History c1050 – c1750* (London - New York 1995), p. 296f.

have stressed the connection between the rise of the latter and the fact that the Union of 1707 provided Scotland with duty-free access to England, the products of the English colonies overseas, as well as the protection of the English Navy.[17] But whilst it is not intended to challenge this line of argumentation, there is at least one aspect to the customs union of 1707, which has been rather overlooked in the past and which needs some further examination. This is the particular tax mechanism imposed upon the Scottish economy in 1707 and its consequences on the composition of the Scottish overseas trade volume. It is suggested that the change from the old Scottish to the English customs system in 1707 not only represented a considerable increase in the effective level of taxation in Scotland, i.e. a formidable *a priori* barrier to economic activity. In fact the application of English rates and procedures in the Customs also co-determined Scotland's peculiar eighteenth-century trading pattern in a partially beneficial way. It did so largely by applying tax rates on imported commodities which in several cases (tobacco, sugar, rice) were far too high to sustain a large level of legal domestic consumption. By a generous draw-back of customs duties paid upon import on the other hand, in connection with some beneficial technicalities relating to the payment of duties on credit (bonds), the incentives to re-export these commodities rather than selling them within Scotland were markedly increased. These mechanisms will now be examined in further detail. The changes in the level and procedures of taxation will be looked at first (2.1.2), prior to a discussion of some technicalities prevailing in the re-export trades, which were responsible for the emergence of the "new" eighteenth century pattern (2.2.1-3). A

17 Devine, "Union of 1707". The impact of the re-export trades on economic development in general have been worked out *inter alia* by F. Braudel, *Civilization and Capitalism 15th – 18th Century,* Vol 1. *The Structures of Everyday Life* (London, 2002, pbk), p. 402, pp. 412-415, p. 440; Id., *Civilization and Capitalism 15th – 18th Century,* Vol. 2. *The Wheels of Commerce* (London, 2002, pbk), p. 408. P. Deane, *The First Industrial Revolution* (Cambridge - London - New York - Melbourne, 1967), p. 53, 58; K. Pomeranz, *The Great Divergence. China, Europe and the Making of the Modern World Economy* (Princeton - Oxford, 2000), ch. 3. D. Acemoglu, S. Johnson and J. A. Robinson, "The Rise of Europe: Atlantic Trade, Institutional Change and Economic Growth," *Centre for Economic Policy Research Discussion Paper* Nr. 3712 (January 2003), p. 2, 4. K. Morgan, "Atlantic Trade and British Economic Growth in the Eighteenth Century" in: P. Mathias and J. A. Davis (eds.), *The Nature of Industrialization,* Vol. 5. *International Trade and British Economic Growth from the Eighteenth Century to the Present Day* (Oxford - Cambridge, Mass., 1996), pp. 14-33, esp. p. 22f., Id., *Slavery, Atlantic Trade and the British Economy 1660-1800* (Cambridge, 2000), ch. 5. C. K. Harley, "Trade: Discovery, Mercantilism and Technology" in Floud & Johnson (eds.), *Cambridge Economic History of Modern Britain*, Vol. I, pp. 175-203. For literature referring to Scotland see ch. 6.

high degree of smuggling was another unintended yet direct effect of the new system. It was "the other side of the coin" so to speak, or the third pillar of Scottish commercial activity in the eighteenth century (2.2.4).

2.1.2 The Change in the Level of Taxation from the Old Scottish to the English Customs System, 1707

2.1.2.1 A New System

In the eighteenth century, customs and excise – forms of indirect taxation – accounted for the major share of yearly total taxation yields in Britain.[18] As the number and rates of excise duties charged did not increase at anywhere near the scale observable for the customs[19], yields of the latter were always considerably higher than excise yields. There can also be no doubt that the growth rate of Scottish taxation yields far exceeded the growth rate of Scottish national income, 1700-1760.

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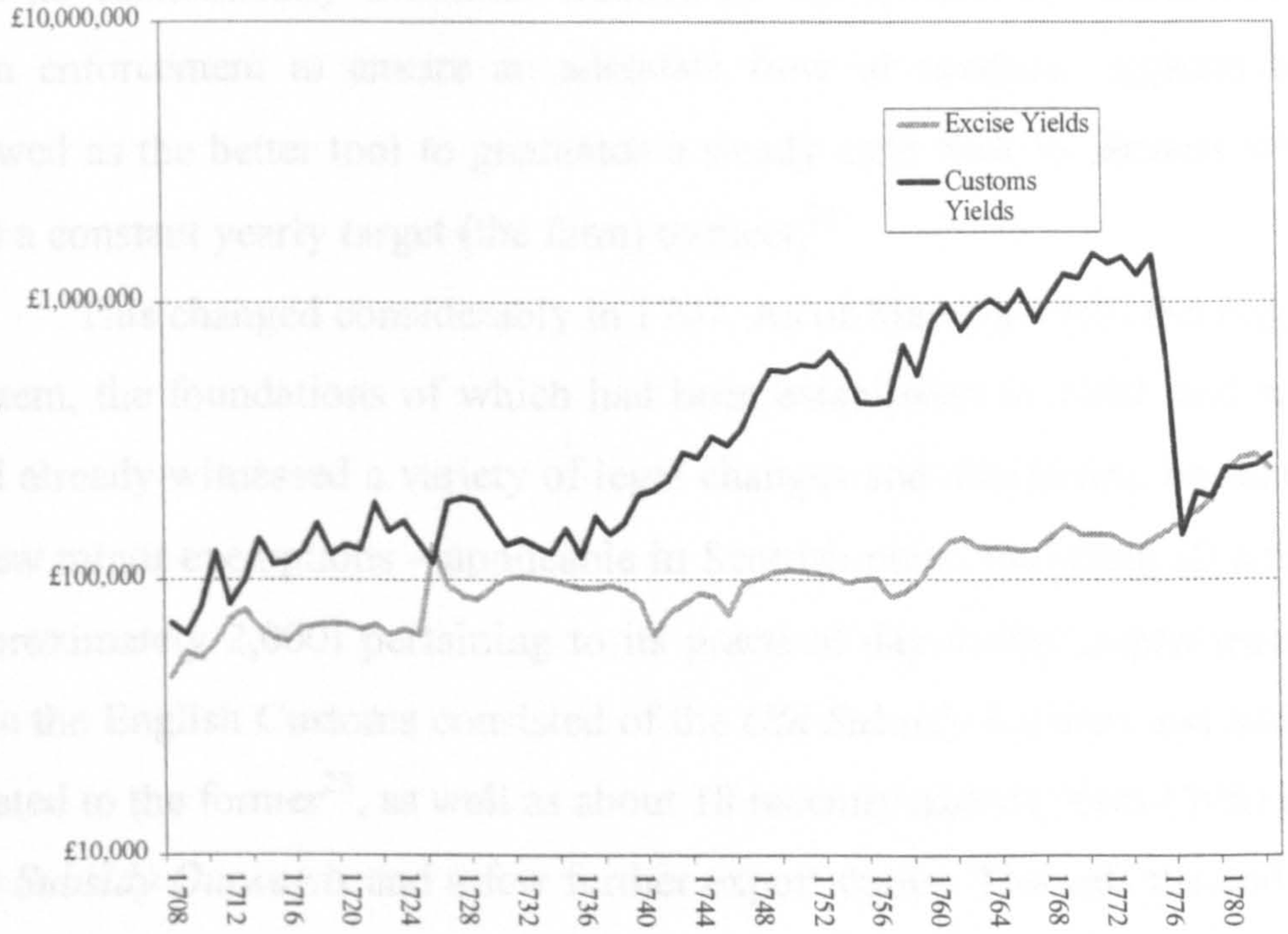
18 Nearly 90 per cent for instance between 1709 and 1712. NAS, GD 224/1057, *General Abstract of the Gross Receipts, Deductions and Net Produce of the Revenue of Great Britain* (1710-1712).

19 Rates and composition of excise duties can be culled from West, *Exciseman's Pocket-Book.*

Figure 1: The Growth of Leviathan: The Development of Customs and Excise Yields Totals (Scotland), 1707-1783
Customs: NAS, E501/1-76, Board of Customs General Accounts. Excise: NAS, E554/1; Gross and Net Produce of Excise in Scotland.



Therefore it can be safely stated, that – in Scotland as well as Britain in general – foreign or overseas trade (including some branches of domestic coastal traffic) bore the main burden of taxation.

Duties on foreign trade had been levied in Scotland since the later thirteenth century, initially modelled following the example of Edward I Plantagenet's Customs.[20] Over the course of the centuries however, the Scottish and English customs systems had diverged. The later seventeenth-century Scottish customs until the Union 1707 were largely farmed, as opposed to England, where the 1660 Customs legislation had abolished the farms. According to the old Scottish Book of Rates (1670), effective net tax rates were radically lower in Scotland than those levied under the English restoration customs regime, 1660-1707. Scotland was a tax haven for traders in the North of England.[21] The Scottish system was notorious for its seemingly inefficient and lenient characteristics. Especially the propensity to destroy all evidence on the incoming cash flows is noteworthy. The farmers of the Scottish

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20 M. Rorke, Scottish Overseas Trade 1275/86-1597 (Unpubl. Univ. of Edinburgh PhD thesis, 2 Vols., Edinburgh, 2001); E. M. Carus-Wilson and O. Coleman, *England's Export Trade 1275-1547* (Oxford, 1963), pp. 1-13.

21 Price, "Glasgow, the Tobacco Trade, and the Scottish Customs".

any more, as both referred to either fixed "rates" or values in one of the two Books of Rates, or a fixed measure of capacity and thus generally fixed units of measurement.[27]

All taxable imports had to pay "Customs". These consisted mainly of the *Old Subsidy Inwards*, and, if applicable, the *Petty Custom*, *Additional Duty* and *One per Cent Inwards*.[28] In subsequent years after 1660 most of the goods liable to Customs became liable also to the *New Subsidy*, *One Third Subsidy* and *Two Thirds Subsidy*, and after 1747 the *New Subsidy, 1747* as well. These were additional or "top-up" duties, levied according to methods and rates applicable under the *Old Subsidy*, which became about as general a levy as the latter.[29] The various *Imposts* and specific duties on the other hand applied to a quite inhomogeneous, yet fixed and specified range of commodities (see Appendix A 2).

Beyond the centrally administrated duties of Customs and Excise there was a variety of fees payable to Customs officials for handling and assessing the cargoes. A variety of additional local duties levied not under the authority of the Customs but by local (burgh or port) authorities and corporations, such as *Shore Dues* in the Port of Leith and Aberdeen[30], and the *Merk per Ton* in Leith and Newhaven, added to the fiscal burden and further increased the effective level of taxation. Since these duties – with the exception of the fees – remained entirely separate from the Customs authorities, and were levied with a lesser degree of rigour and comprehensiveness,

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27 These rates had been laid down in an Act of Parliament in 1660 (12 Car II cap. 4 or first "Book of Rates"). A supplementary or second Book of Rates (11 Geo. I. cap 7) contained only valuations and rates for goods that had not been previously rated but had been assessed *ad valorem* (i.e. upon a current goods' value declared upon oath by the importing merchant). S. Baldwin, *A Survey of the British Customs* [...] (London, 1770), p. iif. For earlier times (Scotland) vide Rorke, Scottish Overseas Trade; on England: Carus-Wilson & Coleman, *England's Export Trade*, pp. 1-13.

28 *Petty Custom* (a top-up fee payable by non-British denizens and British denizens on goods imported in foreign ships), *Additional Duty* (payable chiefly on wines, linens and cottons, as well as tobacco) and *One Per Cent Inwards* (on traffic from a Mediterranean port). H. Crouch, *A Complete View of the British Customs* [...] (1745), pp. 10-15. Baldwin, *Survey*, pp. 177-179.

29 The *New Subsidy* was not payable on tobacco, currants imported in Venetian and British shipping, sugar from the British plantations, European linen, sisters' thread, tapes or inkle, linseed and flax. Crouch, *View* (1725), pp. 1-82, various calculations and examples.

30 For the seventeenth century Aberdeen shore dues see: D. Macniven, "Merchants and Traders in Early Seventeenth Century Aberdeen" in: D. Stevenson (ed.), *From Lairds to Louns. Country and Burgh Life in Aberdeen 1600-1800* (Aberdeen, 1986), pp. 56-69, esp. pp. 60-64.

they cannot be factored into any discussion of eighteenth century changes in British taxation, even though some accounts for these duties have survived.[31]

Outward traffic was much less burdened. If a commodity exported was actually liable to taxation, it paid the *Subsidy Outwards* and (if going to the Mediterranean) the *One per Cent Outwards* (see Appendix A 2). In 1722 however, the *Subsidy Outwards,* which had been the major levy on the export trades, was waived for all but a small, and for Scotland quite insignificant, range of commodities.[32]

Within this framework of taxation, net liabilities however considerably differed from gross or nominal liabilities, as a variety of specific constellations accounted for an according variety of scenarios. There was the *allowance scheme* for *hemp*, *rough silk*, *tobacco* and *wine*, which entitled the merchants to a fixed reduction of customs upon imports according to fixed rates. This took account of the high value of the commodities and the fact that a substantial quantity of the imported commodities might be lost during a voyage. The most significant aspect however, was the system of *draw-backs* on re-exports of some of the most important commodities traded through Scottish ports. Draw-backs of customs duties paid on imported goods that were to be re-exported, could be generally obtained if the commodities had been imported (a) legally and according to regular practice, (b) by British denizens and in British ships, and (c) if the time span between importation

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31 These duties and fees varied from port to port and were not included in the official calculations of net duties by Langham, Crouch and Baldwin: T. Langham, *The Neat Duties (All Discounts and Abatements deducted) of all Merchandize Specify'd in the Book of Rates* (London, 1708); 3rd ed. London, 1715; 7th ed. London, 1754. H. Crouch, *A Complete View of the British Customs* [...], Part I (London, 1725); 2nd ed. London, 1731; 3rd ed. London, 1738; 4th ed. London, 1745; 5th ed. London, 1755. H. Saxby, *The British Customs* (London, 1757). Baldwin, *Survey*. Cf. NAS, *Trinity House Records,* GD 226/18/250, *Table of Shore-Dues*, etc. (single sheet). GD 229/13/36, *Tables of Shore Dues,* Leith (3rd June 1761 – January 1775, 29th May 1776 – 10th May 1780, January 1788 – 18 January 1827), see for example sheets for January 1788, pp. 1-3. Also: GD 229/13/39 *Tables of Pilot Regulations, Table of Pilotage, Birthage and Flag or Light Dues*. Cf. also S. Mowat, *The Port of Leith. Its History and its People* (Edinburgh, 1982), pp. 249-251.

32 Crouch, *View* (1725), p. 367. Notable exceptions, which continued to pay outward duties, were drugs, chemicals and woods used in dyeing processes (such as indigo, Brazil wood, cochineal etc.) and French linens if shipped to the colonies (*Cambrics* and *lawns*). The main British goods which after the 1723 still paid duty if exported or carried coastwise, were coals of all sorts, horses, lead (incl. ore), skins and wool. Crouch, *View* (1745), pp. 266-294; and Baldwin, *Survey*, Pt. II, pp. 1-9.

and declaration[33] and re-exportation did not exceed three years (re-export "in time"). Provided that these criteria were met, tobacco for instance could draw back 100 per cent of nominal import duties (i.e. calculated as if paid down in cash). Muscovado sugar would draw back 79 to 89 per cent; rice could obtain a refund of between 87 and 90 per cent of duties paid.[34] Only French goods could draw back exceptionally few duties paid on import if re-shipped, regardless of the applicable time framework.[35] Furthermore, many domestic exports, such as *inter alia* grain, candles, various types of fish and linen cloth, benefited from *debentures* and *bounties* (at various times and of varying duration, determined by Acts of Parliament), their commercial effect being very similar to the draw-back scheme.[36]

Whilst it is generally fair to say that in 1707 and thereafter, the level of taxation in Scotland increased just by definition, i.e. through a mere increase in the range of commodities liable to duties that went further than the Old and Additional Subsidies, as well as a general increase in the number of duties, it is also interesting, if not of real significance, to note that Scotland, or certain regions, even persons, remained either temporarily or permanently exempt from some duties.[37] (a) The

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33 30 days were allowed between a ship's first docking at the port and an import declaration of the cargo(es).

34 The implications of these measures will be discussed in more detail below. See present chapter, section 2.2.2.

35 There were but a few commodities that did not benefit from this nearly comprehensive drawback scheme; these were mainly coffee, tea and wines. NAS, CE 7/11, *Instructions 1707*, App. No. 24, *Scheme for Drawbacks*.

36 NAS, CE 7/11, *Instructions 1707*, p. 11f.; §§LIII-LXIII. Crouch, *View* (1755), pp. 364-381.

37 For a good example of political lobbyism on that issue see *Note from Lord Kames about Coal and Culm* (between 1748 and 1756?). This document stated that culms and coal refuse only useable for salt making and lime burning, were taxed too heavily beyond the Forth, as these items were frequently assessed as coal rather than culms. The former was taxed about five times as high as culms (but the act relating to the coal duties did not make a clear distinction between culms and coals). The Earl of Seafield made a similar case for a strong causal nexus between national wealth and the imposition of coal duties which was probably too extreme. In the counties not benefiting from the Forth coal duty exemption, people were allegedly cutting turf instead of purchasing coal (which was too expensive due to the duties). According to Seafield, this pool of labour was lost to other opportunities of increasing the nation's wealth such as growing flax and turnips and cutting hay etc. He quantified the opportunity costs of cutting turf at £20,000 Sterling per year. According to Seafield, the annual yields of the coal duties were seen as infinitesimally low compared to what would be gained by the additional wealth of £20,000 if spent and consumed, not only by additional consumption, but also taxation (Excise yields on the commodities spent out of this extra income which would have been realised if coal duties were abolished, would again, according to that memorandum by far have exceeded the coal duty yields). Being a prominent owner of coalfields himself, who would certainly have benefited from tax exemption of coal, Seafield's arguments are more propaganda than anything else. NAS, *Seafield MSS*, GD 248/954/4/23, *Anonymous Letter Anent Coal Duties*, dated 1746 or 1747. GD

duties on coal carried coastwise were waived within the Firth of Forth estuaries.[38] The logic behind that measure, successfully secured by the Scottish coal mining interest during the Union talks, was that the lion's share of Forth coal consisted of small coal. This type of refuse coal was virtually unsuitable for all but the most basic and crude heating processes. The application of the full level of domestic coal duty may in fact have brought not only some collieries to their end, but the Forth salt industry as well. These business ventures were often vertically integrated and at least some of the collieries, supplying the salt works with cheap fuel, were already verging at the edge of zero marginal returns.[39] (b) Some aristocrats enjoyed hereditary exemptions from customs duties which had pre-dated the Union, and which were successfully retained after 1707 (by Act and Treaty of Union).[40] Most notably this applied to the Duke of Queensberry and the Earl of Hopetoun, the two major lead producers in Scotland whose lead mines lay close to the Firth of Forth. As exports of bar lead normally had to pay a duty of £1 per ton, working out at a rather moderate tax rate of six to seven per cent of its f.o.b. value in 1755[41], this exemption certainly stimulated the export of bar lead by these producers to their main market, the Netherlands.

248/954/4/26, *Memorandum* on the same topic. GD 248/954/5/29, GD 248/954/5/35; GD 248/954/5/41, *Memorial in Relation to the Duty on Coals in Scotland*. The tax benefits that were finally secured however, were restricted to the Firth of Forth (similar benefits were granted to parts of the English coastline in Cumbria), and in operation between 1709 (the date from which the tax should become applicable in Scotland) and 1793. Crouch, *View* (1731), p. 43f, p. 47f.; Id., *View* (1738), p. 44f., p. 48. Whatley, "Salt, Coal and the Union," p. 34f., p. 40f.; Whyte, *Scotland before the Industrial Revolution*, p. 297f.

38 As soon as it passed the specified landmarks (St Abb's Head in the South, Redhead in the North), it became liable to the regular British coal duty on coastal traffic.

39 B. F. Duckham, *A History of the Scottish Coal Industry*, Vol. 1. *1700-1815. A Social and Industrial History* (Newton Abbot, 1970), pp. 14-16.

40 The Earl of Leven for instance claimed exemption from the duties on imported wine. NAS, GD 26/9/416, *Leven and Melville Muniments*: *Letter from the Commissioners of the Customs to the Earl of Leven, 11 December 1708.*

41 Depending upon whether the import valuation of £15 Sterling or the domestic export valuation, presumably already including an allowance for tax, of £16 10s Sterling is taken. Valuations taken from TNA, Customs 14. Duties taken from Langham, *Neat Duties* (London, 1708 and 3rd ed. London, 1715). Crouch, *View*, Pt I (London, 1725, 2nd ed. London, 1731, 3rd ed. London, 1738, 4th ed. London, 1745, 5th ed. London, 1755). Corrected version of Crouch's fifth edition = Saxby, *Customs*.

2.1.2.2 Quantifying the Change

With the incorporation into the mercantile English tariff regime and the abolition of a reportedly ineffective and corrupt system of farmed-out customs (which nevertheless was certainly much better adapted to a decidedly lower per capita income), Scotland in 1707 was thus subject to an abrupt and quite extreme change in the level of real taxation (mostly imports). Theoretically an exact quantification of the change in the level of taxation between two or more reference points could be made according to the following formulas:

$$\frac{dT}{T} = \frac{(T_{x,n} - T_{x-1,n})}{T_{x,n}} \qquad (1)$$

$$\frac{dT}{T} = \sum_{i=1}^{n}\left(\frac{dT_1}{T_1} \times \frac{q_1}{q_M}\right) + \left(\frac{dT_2}{T_2} \times \frac{q_2}{q_M}\right) + \ldots + \left(\frac{dT_n}{T_n} \times \frac{q_n}{q_M}\right) \qquad (2)$$

where

n = number of goods entering the volume of imports
x = year x
T_1 = effective net tax rate per unit (gross import duties minus discounts) for each good within total imports in year x
$T_{1\text{-}n}$ = effective net tax rate per unit (gross import duties minus discounts) for each good within total imports in year x-1
dT = difference in the net tax rate for good n per unit between the two points of measurement
dT/T = "change in the level of taxation"
q_M = total volume of imports (£Sterling)
q_i = total value of good i imported (£Sterling) etc.
The quotient q_i / q_M represents the share of good i in total M of the volume of trade/imports at either the base (Paasche) or current (Laspeyres) period.

In the present context a discussion of changes in the level of taxation in and after 1707 needs to be based on *effective net tax rates*, i.e. the amounts that merchants factually paid upon importation according to regular practice and after all possible standard deductions. Nominal import duties could differ considerably from net duties. The best point to start with are therefore contemporary merchants' digests and Customs officers' manuals, which contain exact quantifications of net liabilities for

each taxable commodity entering the overseas trades.[42] The main downfall of this procedure, however, apart from the fact that it is totally impracticable for the present subject of discussion, is that it ignores yearly fluctuations and long term changes in the structure of the volume of imports by assuming a constant structural composition of the volume of imports. But without even considering such a tedious (and partly impossible, due to the absence of detailed trade statistics for Scotland prior to 1755) task at all, some remarks can nevertheless be made by examining only the most important import commodities; i.e. those goods that represented the majority of Scottish imports in monetary (volumetric) terms in the long run.

The change in the level of taxation ***in 1707*** can then be approximated using a select range of taxable commodities of particular importance for Scotland's import trade and tracing their effective net tax rate as of 1670 (last known Scottish Book of Rates) and 1708 (Langham's first digest of British Customs, see following section).[43]

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42 See section 2.1.3 below for further discussion.

43 An exact quantification of the change in the level of taxation in 1707 remains of course impossible, as nothing is known about the precise composition of the Scottish trade volume, as well as rates, yields and procedures of levying customs duties in Scottish ports between 1670 and 1707. The only available studies of remotely related scope, T. C. Smout, *Scottish Trade on the Eve of Union 1660-1707* (Edinburgh - London, 1963) and Graham, *Maritime History*, pp. 100-108, are unfortunately elusive on that matter.

Table 1: The Change in the Level of Taxation of Scotland's Import trades, 1670/1708, Select Commodities, £Sterling/unit
1670: NAS, E76/8, *The Rates of his Majesties Customes (Scotland)* (Edinburgh, 1670)
1708: T. Langham, *The Neat Duties (All Discounts and Abatements deducted) of all Merchandize Specify'd in the Book of Rates* (London, 1708).

	measure	1670 (£Sterling/unit)	1708 (£Sterling/unit)	Increase 1708/1670
Tobacco (British plantations)	lb	0.003	0.02	825%
Muscovado (Brit. Plantations)	cwt (112lbs)	0.08	0.17	222%
Flax (undrest)	cwt (112lbs)	0.04	0.16	352%
Hemp (rough)	cwt (112lbs)	0.03	0.13	504%
Narrow German / Muscovy	120 ells	0.17	0.67	402%
Ordinary deals (under 20ft)	120	0.13	1.18	945%
Iron unwrought / bar iron	ton	0.33	2.08	623%
Old Iron	ton	0.02	0.47	2270%
Pitch / Tar (Brit. Plant.)	last	0.2	0.41	207%
Ashes: pot ashes	last	0.6	6.64	1106%
Ashes: wood ashes	last	0.25	1.14	454%

The Scottish (1670) figures have been converted into Sterling using the (officially) fixed exchange rate of £1 Sterling / £12 Scots.
Old iron: Taken from: H. Crouch, *A Complete View of the British Customs* [...], Part I (London, 1725).
Note: In the Scottish Book of Rates (1670), the flax cwt was specified @ 100lbs which has been taken into consideration in the present calculation. In lieu of such specifications in the same source as to the cwt for Muscovado and hemp, however, the calculations have been done on the 112 basis.

It appears safe to state that the increase in taxation levels was enormous.[44] This was partly reflected in the development in revenue yields. Whereas up to 1707 the Scottish customs had been farmed out at £28,000 to £30,000 Sterling per annum in most years, vis-à-vis a gross yield total of about circa £49,000 Sterling per annum immediately prior to the Union[45], Scottish customs yields in the first British fiscal year for the Customs (Mayday 1707 to Michaelmas 1708 = 17 months) were £70,008 Sterling, and £64,272 Sterling in the Exchequer (Customs) year 1708/9 (Michaelmas-Michaelmas) respectively. This was more than double the sum of the

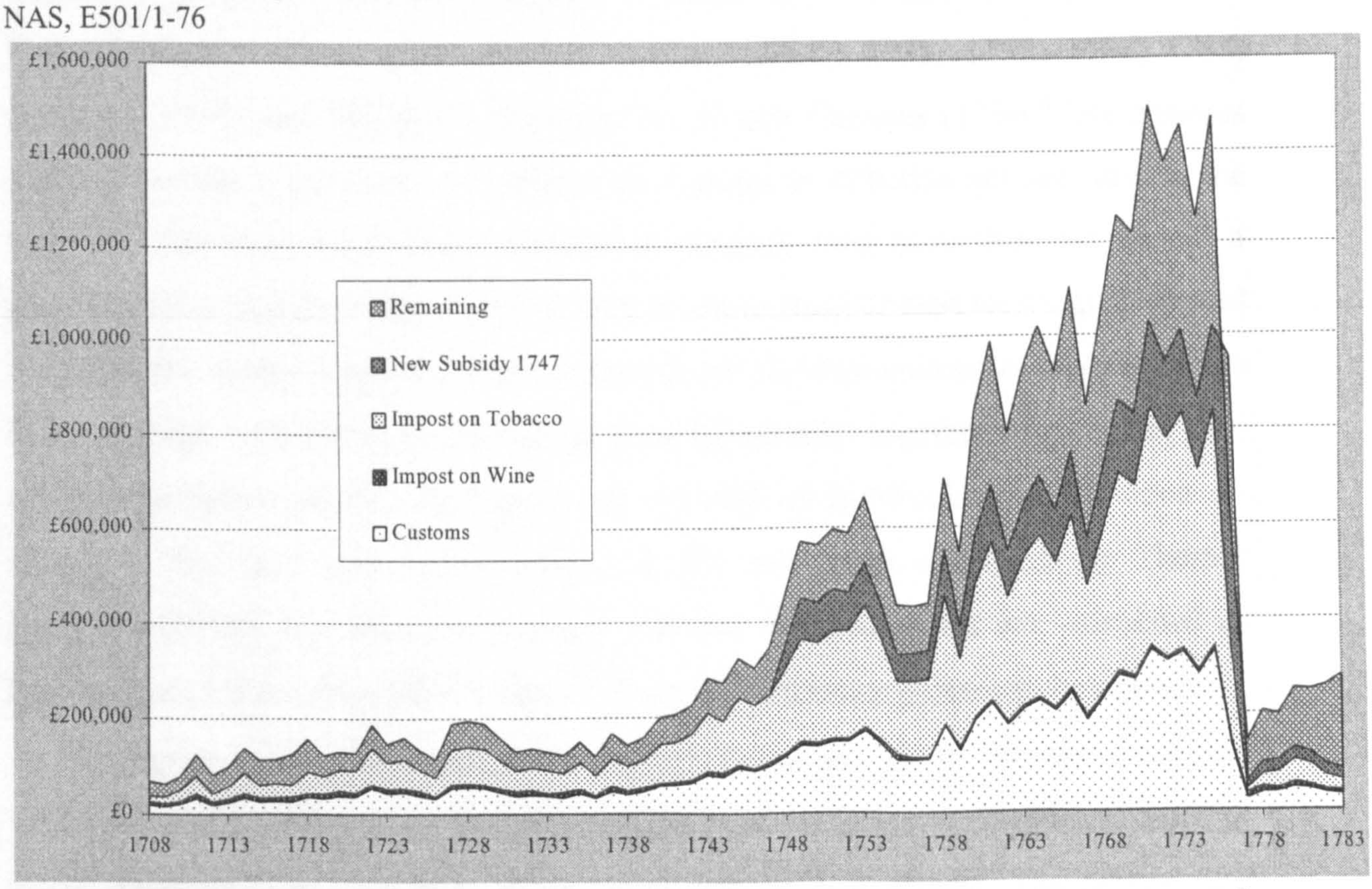
44 It needs to be borne in mind that the largest increase in English taxation (customs) fell into the period between 1685 and 1704. Between these dates the *Impost on Wines and Vinegars*, *Impost on Tobacco*, *Impositions 1690*, *Impositions 1692/3*, *Additional Duty on Spice and Pictures*, *Second 25 Per Cent on French Goods*, two *Duties on Coals, Culms and Cinders*, *New Subsidy*, *15 Per Cent on Muslins*, *One Third Subsidy*, *Additional Duty on Spice and Pictures* and the *Two Thirds Subsidy* were imposed. It is not known whether an increase in the level of taxation similar to the one observable for England took place in Scotland between 1685 and 1705 as well. Therefore the above table is to be used with caution. Statements such as made by Ralph Davis as to a precise percentage figure for the change in the level taxation in England (customs) during the later seventeenth century are doubtful, given the above limitations set by the uncertainty of the structure of the English (and Scottish) trade volume ("index number problem"). R. Davis, "The Rise of Protection in England, 1689-1786," *EcHR*, Second Series, XIX (1966), pp. 306-317.

farm until two years earlier, and about 20 per cent higher than gross yields under the old Scottish system in and about 1706.[46]

2.1.3 Subsequent Changes in the Level of Taxation (Customs)

The development of Scottish customs revenue yields in subsequent years can be displayed as follows.

Figure 2: The Development of Customs Revenue, Scotland (1707-1783)
NAS, E501/1-76



Figures for money and bonds have been aggregated. Note that most of the Impost on Tobacco, as well as the Old Subsidy were refundable if commodities were re-exported within three years. Thus a large share of the above yields is actually "virtual". Prior to 1722, the heading "Customs" probably also covers yields of Subsidy Outwards.

45 Price, "Glasgow, the Tobacco Trade, and the Scottish Customs," p. 7.

46 Post-1707 customs yields: NAS, E501/1seq. Figures for farms prior to Mayday 1707: e.g. NAS, E231/2/3 *Abstract Account Customs Yields Scotland (1 May 1707 to 25 March 1708).* The value at which the customs were farmed-out, needs, of course, to be seen as a lower margin for factual yields (although losses made by the Scottish Customs' farmers were not unheard-of). The Exchequer applied different accounting periods for customs and excise; the fiscal year for the customs ran from Michaelmas to Michaelmas (end of September); for the Excise the accounting period ran from July to July.

It is obvious that these customs yield curves mirror the rise of the (Glaswegian) tobacco trades.[47] For the present purpose, these yield curves will only be set in relation to existing evidence on changes in duties (and not the volume of commodities traded which will be discussed in chapters 3-6). The discussion of changes in the level of taxation will be based on changes in effective net tax rates payable by British denizens as given in contemporary merchant's guides and manuals for customs officers designed for essentially the same purpose: to "digest" or clarify what the ever-increasing complexity of the English customs legislation actually meant in terms of duties factually payable on each commodity imported and exported. After 1707, Thomas Langham's *Digests* for merchants (1708, 1715), and Henry Crouch's *Views of the British Customs* (1725, 1731, 1738, 1754, 1755, ("Saxby", 1757) and Baldwin's *Survey of the British Customs* (1770)[48] for customs officers provide a good set of evidence on changes in effective net tax rates in the long run. Any time the Customs legislation changed, such as to alter the rates of a particular duty significantly, sooner or later a new manual or merchant's guide would be published. Accordingly the above guides listed all commodities as featured in the Book of Rates of Charles II and George II alphabetically, together with the net total of customs duties payable on import and the total of drawbacks possible upon re-exports.[49] The first year in the series, i.e. the net duties calculated by Thomas Langham (1708), has been set to equal 100 and the remainders are calculated as percentages of the 1708 effective duty.[50] Then the following points can be made.

(1) *Imports*. During the eighteenth century the general level of import taxation without doubt increased (as a compensation, exports were nearly completely freed in 1722). Prior to 1747, however, the increase was modest at best. The fifteen new duties that were introduced between 1706 and 1746 all related to commodities that

47 Ch. 4, sections 4.3.2.1.1-2.

48 Langham, *Neat Duties* (1708; 3rd ed. 1715; 7th ed.1754). Crouch, *View*, Part I (1725, 2nd ed. 1731; 3rd ed. 1738; 4th ed. 1745; 5th ed. 1755; Saxby, *Customs*; Baldwin, *Survey*. Later alterations in the Customs structure which postdate the present period of examination are captured in T. M. Barker, *The Merchants and Traders Guide* [...] (London, 1787).

49 Furthermore, Crouch usually made a difference between goods imported by British subjects and goods imported by foreigners, which resulted in different overall duties payable (due mainly to the *Petty Custom*).

were almost entirely irrelevant for Scotland's overseas trade.[51] Only French linen cloth and wines experienced an increase in real taxation prior to 1747.[52] Some imported linens experienced an increasing level of taxation between 1707 and 1747 as well[53], but the main items imported into Scotland in the period were either taxed at constant rates, 1707-1747 (Narrow German and Muscovy), or could be imported duty free (Irish linens since 1704).

50 For the present purpose all duties have been calculated as if paid down in ready money (no bonds) upon landing and as if imported by British merchants only (thus applying the lower overall sums of customs duties).

51 Duties on: cinnamon, cloves, mace, nutmegs, raisins, pepper (1709); candles (1710, 1711); hops (1711); hides, skins, parchment, vellum, cards and dice, starch, gold and silver wire (1711, 1712); soap, paper, millboards, pasteboards, scale boards, chequered linen (1712, 1714); sailcloth (1713), wrought plate (1720); apples (1722); coffee, tea, chocolate (1723); foreign Cambrics (1742); wine (1745), New Subsidy, 1747 (1747). See Appendix A 2.

52 Affecting *French* and other *canvas*, French *lawns* and cloth from the *Bretagne*, *Cowsfield* cloth and *Hamburg* and *Silesia* cloth. *Poldavies* and *Lockrams* were listed as paying higher duties in Crouch (1731). *Cambrics* were listed as paying a duty increased by 53.78% (the piece containing 13 ells) or 62.3% (the half-piece) in Crouch (1745), compared to 1731, but those duties were lower again in Crouch (1755). This is presumably a reflection of the temporary *Duty on Foreign Cambrics imported* (1742), a duty which was abolished again in 1749. The majority of linen cloth continued to pay the same amounts of customs duties until the introduction of the *New Subsidy, 1747,* which generally increased all duties on linen. German Linens cf. ECA, CRB, SL30/4/6, Box 2, *Petition of Merchants Trading from / to Germany*, 28 February 1774.

53 Thanks to the subsequent establishment *New Duty on Soap, Paper, Millboards, Pasteboards, Scale Boards, Linen Chequered, Striped &c. Imported* (1712), the *New Duty on Sailcloth Imported* (1713), the *Additional Duty on Soap, Paper, Millboards, Pasteboards, Scale Boards, Linen Chequered, Striped &c. Imported* (1714), and the *Duty on Cambrics Imported* (1742-1749). These duties mainly applied to *French* linens and Hamburg and *Silesia* cloth.

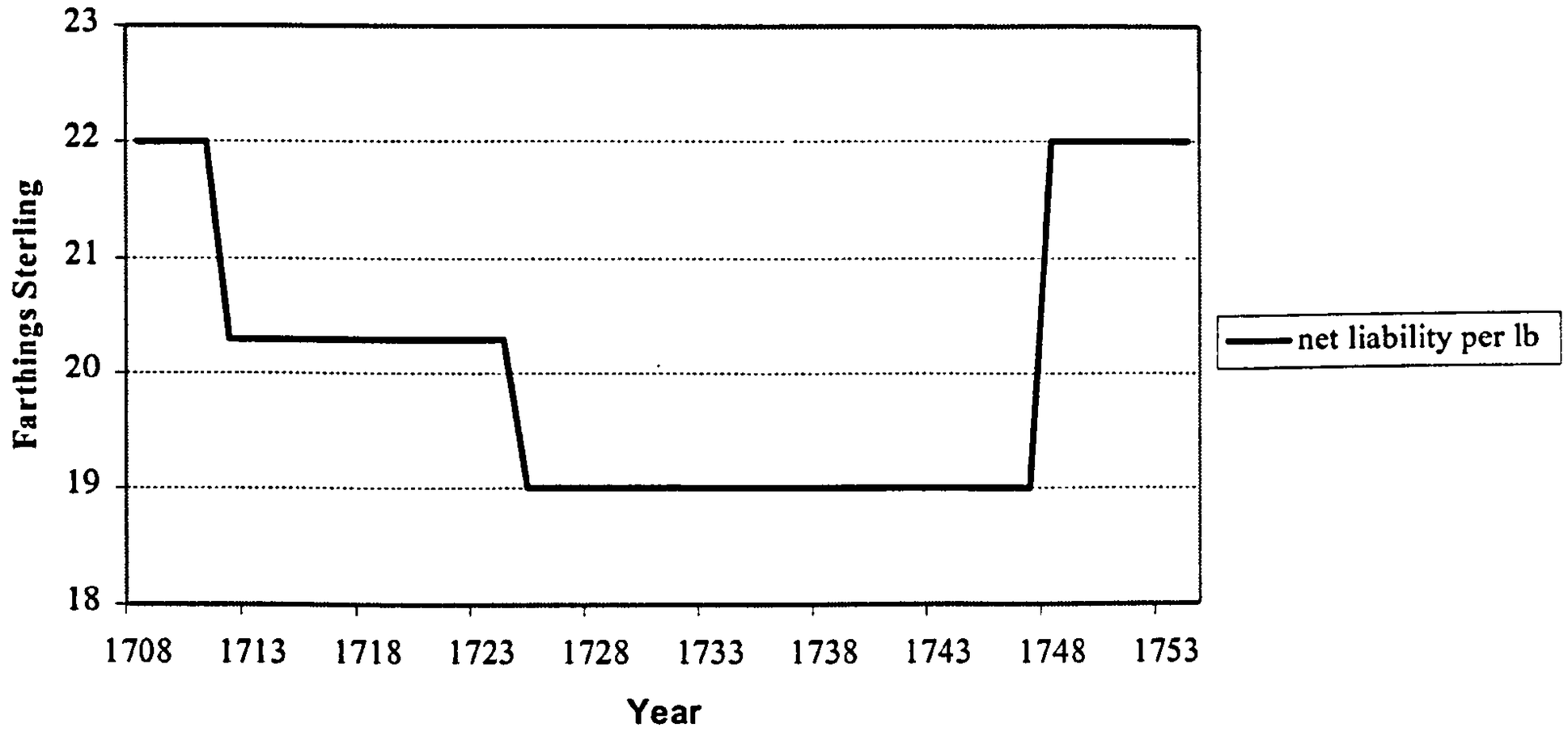
Table 2: Changes in the level of taxation for selected commodities, 1708-1770

"Change": Difference between reference and base year, divided by base year value. Two or more identical consecutive values indicate constant rate of net duty.
Base year: 1708 (Langham's first digest), apart from old iron (1725) and rum (1731).

		1715 Langham	1725 Crouch	1731 Crouch	1738 Crouch	1745 Crouch	1755 Crouch	1770 Baldwin
Tobacco (British)	lb	-8%	-14%	-14%	-14%	-14%	0%	14%
Muscovado (Brit.)	112lbs	0%	0%	0%	0%	0%	45%	90%
Rum	gallon				0%	0%	26%	26%
flax (raw)	112lbs	0%	0%	0%	-100%	-100%	-100%	-100%
hemp (raw)	112lbs	0%	0%	0%	0%	8%	27%	27%
Narrow German/Muscovy	120 ells	0%	0%	0%	0%	0%	30%	60%
ordinary deals (under 20ft)	120	0%	-100%	0%	0%	0%	21%	21%
iron unwrought / bar iron	ton	0%	0%	0%	0%	0%	17%	17%
iron: old (bushel)	ton			0%	0%	0%	26%	26%
salt: Spanish	wey	0%	9%	9%	9%	9%	48%	49%
salt: French	wey	198%	211%	211%	211%	211%	250%	250%
pitch / tar (Brit. Plant.)	last	-14%	-14%	-14%	-14%	-14%	16%	16%
ashes: pearl ashes	last	0%	0%	0%	0%	0%	11%	11%
ashes: pot ashes	last	0%	0%	0%	0%	0%	11%	11%
ashes: weed ashes	last	-1%						
ashes: wood ashes	last	0%	0%	0%	0%	0%	26%	26%
beef	barrel	0%	0%	0%	0%	0%	35%	prohibited
cowhides	piece	0%	0%	0%	0%	0%	27%	27%
calve skins	dz	0%	0%	0%	0%	0%	27%	27%

British plantation tobacco, Scotland's main import and re-export, even benefited from a slight lowering of duties during the first half of the eighteenth century. It was not until 1747/55 that the net duties per lb of tobacco would re-attain their 1708 level.

Figure 3: Changes in the Effective Net Tax Rate on British Colonial Tobacco, 1708-1755
Sources: see text.



The first decrease in the tax burden on tobacco can be inferred from the different net liabilities per *lb* of tobacco in Langham's first digest in 1708 and its second edition in 1715. They differ by precisely 2 *farthings* (0.5d) per *lb* (8 per cent of net liabilities).[54] A further decrease of 6 per cent from 1715 to 1725 (1 farthing or 0.25d) in net liabilities per *lb* of tobacco between Langham's second digest (1715) and the first edition of Crouch's customs manual (1725) is most certainly attributable to Walpole's "Tobacco Bill" in 1723. This bill provided for the abolishment of the half-penny import duty retained by the Crown upon re-exportation, thus reducing the level of duty paid by two farthings and increasing the drawback upon re-export to 100 per cent, as well as introducing a series of further discounts on imported British plantation tobacco.[55]

With regard to Scotland's single most important import commodity in the century (tobacco) therefore, the level of taxation even slightly decreased after the Union. Duties on German linen remained constant until 1747. Duties on sugar did

54 Langham, *Neat Duties* (1708, 1715).
55 J. M. Price, "The Excise Affair Revisited. The Administrative and Colonial Dimensions of a Parliamentary Crisis" in: Id., *Overseas Trade and Traders. Essays on Some Commercial, Financial and Political Challenges Facing British Atlantic Merchants, 1660-1775* (Aldershot, 1996), pp. 257-321; Id., "Glasgow, the Tobacco Trade, and the Scottish Customs," pp. 26-8.

not increase either between 1708 and 1747. For at least 50 per cent of Scottish imports[56] the level of taxation therefore remained constant or even decreased during the first five decades after the Union. This situation, however, changed in 1745/47. In 1745 a new duty on wine and vinegar was introduced, amounting to £4 Sterling per *tun* (£8 per *tun* on French products, to be topped up by further impositions on wine in 1763).[57] Whereas the wine duty is unlikely to have had a large overall effect[58], the first general increase, concerning a wider range of commodities and thus working out at a general increase in the level of taxation (Customs) occurred when the "*New Subsidy, 1747*" became applicable.[59] *New Subsidy, 1747* was to be levied on top of all existing prior duties. It was applicable to the same range of commodities and rates charged under the *Old Subsidy (1660)*, apart from those commodities that were generally exempt from the payment of import duties. It thus increased the level of taxation by a further five per cent of the particular goods' value in the Book of Rates.[60] The increase in 1747 can be visualized from Figure 2 above.

Many other goods, such as raw material inputs or intermediary products for domestic industrial production, such as *inter alia* flax, linseed, organic dyes (madder), as well as all kinds of timber items from the plantations, were even completely freed from import duties.[61] It can therefore be argued that prior to 1747 those commodities most important for Scotland's trade, in total representing far more than 70 per cent of total imports in monetary volumetric terms (tobacco, sugar, linens and textile inputs), were not subject to an increase in taxation. (As will be shown below, this aspect must not be confused with the fact that effective tax rates on some goods, such as tobacco, whilst not or only insignificantly changing over time, could nevertheless be excessively high). Furthermore, those commodities traded overland

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56 In 1755-9, tobacco, sugar and German linens accounted for circa 50 per cent of total Scottish imports. See ch. 5 below.

57 Crouch, *View* (1755), p. 27.

58 As wine never accounted for more than 4 per cent of legal imports into Scotland, 1755-1776. TNA, Customs 14.

59 Crouch, *View* (1755), pp. 22-24. For subsequent amendments of this duty vide Baldwin, *Survey* (1770), pp. 212-214. Accounts for this duty were not kept prior to September 1747. NAS, E501; the first account covering the Subsidy 1747 begins with Michaelmas 1747 to Michaelmas 1748.

60 Being an additional poundage duty of five per cent of the value of the goods rated in either 12 Car. II c. 4 or the supplementary Book of Rates (11 Geo. I. c. 7), it worked out in the same way as if another *Old Subsidy* had been just added to the portfolio.

or domestically, such as Scotch cattle and linen sent to England, also remained free from duties and any commercial restrictions as of 1707. This was a stimulus to economic development which in the long run proved to be as powerful, if not more powerful, than for instance the colonial import and re-export trades.

(2) *Exports*. Most exports that had been liable to *Subsidy Outwards* were completely freed from duty in 1722. Accordingly a quite substantial decrease of 39 per cent in total Scottish customs yields between 1722 and 1726 can be observed.[62] Whilst the 1722/3 reform has sometimes been referred to as a "reorganisation" of the customs in 1722-24, it was in fact only a slight adjustment of the system to the reality of fraudulent practices, which threatened to undermine the British tax yield base. It can be classified as follows: (a) The abandonment of *export duties* on most exports from Great Britain and the abandonment of some import duties of minor importance in 1722; (b) the re-organization of the collection of duties on *coffee*, *tea* and *chocolate* 1724; (c) the increase of allowances, deductions and discounts 1723, mainly on imported tobacco. The measures summarized under (c) have been discussed by Price[63]; their impact has been visualized in the graph showing the development of net liabilities on tobacco above. The first two aspects however, need to be briefly dealt with in the light of the overall discussion of the Scottish trade pattern and the following analysis of the available sources for Scottish commercial fluctuations.

(a) A common and somewhat excusable misinterpretation of the 1722-24 changes in legislation has it that in 1722 all British goods were freed from export duties.[64] This is incorrect, but there is a grain of truth in it in Scotland's case. As of 8 Geo. I. c.15, §8, the Subsidy Outwards was waived on most goods that had been taxed upon export before. The number of taxable exports had not been great prior to 1722, but had nevertheless covered some of the more important manufactures of the British economy, such as iron and leather manufactures, as well as certain types of

61 Flax: 4 Geo II c. 27 §1. Madder: 8 Geo I c. 15. Linseed: 7 Ann c. 7, §23 and 3 Geo I c. 7 §38. Timber from the British Plantations: 8 Geo I c. 12 §2, 1 Geo II c. 17 §5, 16 Geo II c. 26 §2.

62 Calculated from NAS, E501/15-19. Whilst this might be partly attributable to the abolishment of the export duties, the 1720s were also a time of sluggish macro-economic performance, which might have kept trade figures low in general.

63 Price, "Excise Affair," p. 265.

64 Ashworth, *Customs and Excise*, p. 37.

linen cloth. Without doubt the abolition of duty on these goods exerted some considerable commercial stimuli. Some re-exports, mainly dyestuffs and dye-woods (fustic, logwood, indigo[65]), continued to pay export duties (with some Mercantilist logic behind that).[66] But at least in Scotland's case these goods were hardly ever re-exported. Even though after 1722 several new duties on exported coals, a duty on re-exported lapis calaminaris, gum Senega, beaver skins and French Cambrics and lawns were added[67], this would not alter the general situation created by the "reform" in 1722.

Some minor, yet in terms of regional economies not necessarily unimportant, domestic exports however continued to be liable to *Subsidy Outwards* or domestic duties after 1722.[68] These were *inter alia* coal, horses (important for example in the south-western Scottish ports that had a small mutual trade in horses with Ireland) and – nominally – lead.[69] Coal paid outward duties in either case, i.e. regardless whether shipped domestically between two British ports or exported abroad. It continued to do so after 1722. Lead, accounting for 14 per cent of total domestic exports on average in 1755-59, did so, too but here a special case applied. Playing a significant role in Leith's export trade (and more than 90 per cent of Scottish lead exports went through Leith in 1754-55), as Scotland's main lead fields were located close-by in the Scottish Borders, two major producers, the Duke of Queensberry[70] and the Earl of Hopetoun[71], were exempt from the payment of the Subsidy Outwards by private grant.[72] As these were factually the only exporters of lead in the period, Scottish lead exports effectively left the country duty-free. A similar case applied to *coal* from certain producers. Sir Peter Halket for instance was exempted from all customs

65 Dyestuffs: 8 Geo I c.15 §12. Crouch, *View* (1725), p. 30.

66 As these foreign raw materials were considered useful for the developing British textile finishing industry (linen). The application of high outward duties combined with reduced draw-back facilities was designed to prevent third parties from obtaining cheap American dyestuffs via Britain. Ashworth, *Customs and Excise*, p. 42. Crouch, *View* (1755), pp. 49-51; Baldwin, *Survey* (1770), Pt. II, pp. 14-18.

67 Baldwin, *Survey* (1770), pp. 14-18.

68 Alum, coals, Coney hair (wool), copperas, glue, hair of all sorts, hare wool, horses, Lapis calaminaris, lead, lead ore, litharge of lead, tanned leather, skins of all sorts, tin, wool cards, white woollen cloth.

69 Crouch, *View* (1725), p. 30.

70 E.g. NAS, E504/6/2, I/1747, Goods Exported, Nr. 3.

71 E.g. NAS, E504/6/1, III/1744, Goods Exported, Nr. 7.

72 Crouch, *View* (1725), p. 367.

duties on small coal by decree of the Court of Exchequer and Commissioners' Order from 23 August 1738 (but probably this privilege had been in existence prior to the Union).[73] These small coals were still exported in some quantities to Danish and Swedish ports in the period examined, even though it is commonly acknowledged that it was highly uncompetitive on foreign markets.[74]

Generally speaking therefore, the burden on outward traffic was negligible in the period under consideration. For Scotland – given the particular structure of the export volume, again focusing on the rather important commodities – the following picture obtains:

Table 3: The Development of Export Duties, 1708-1770 (£Sterling)
Duty per unit, net liabilities. Exported by British denizens

		1708	1715	1725	1731	1738	1745	1755	1770
Linens	piece	0.025	0.025	free	free	free	free	free	free
Sailcloth		free	free	free	free	free	free	free	free
Woollen Cloth		free	free	free	free	free	free	free	free
Stockings (woollen)		free	free	free	free	free	free	free	free
Haberdashery	cwt	0.05	0.05	free	free	free	free	free	free
Grain		free	free	free	free	free	free	free	free
Lead	ton	1	1	1	1	1	1	1	1
Iron Manufactures	ton	0.8	0.8	free	free	free	free	free	free
Coal: Small	chalder	0.15	0.3	0.3	0.3	0.3	0.3	0.3	0.7
Coal: Great	ton			0.05	0.05	0.05	0.05	0.05	0.6
Fish		free	free	free	free	free		free	free
Leather Manufactures	cwt	0.23	0.23	free	free	free	free	free	free

Stockings: woollen, worsted. Iron: Iron, Old Iron, Manufactures. Coal: Newcastle chaldron.

This situation was reflected in yearly customs yields. A random example of the burden on the export trades in comparison to the import trades may be taken from the Greenock port books in 1755. Greenock was Scotland's biggest port in terms of traffic and cargoes handled in 1755, and the range of commodities concerned for export was reasonably big in order to reflect a statistically representative basket of commodities on Scotland's export balance.

73 NAS, E504/6/1, III/1745, Goods Exported, Nr. 3, Nr. 15.
74 NAS, E504/22/6; III/1754, Goods Exported, Nr. 18.

Table 4: Customs Duties paid on Exports / Outward Traffic, Greenock (1755), £ Sterling
NAS, E540/15/7[75]

	New & Additional Duty on Coals	Subsidy Outwards	Excise on Salt exported (used in curing provisions)	Totals
Ladyday (5 Jan-5 Apr)	1.63	13.10	46.39	61.12
Midsummer (6 Apr-5 Jul)	1.17	0.3	18.25	19.71
Michaelmas (6 Jul-10 Oct)	7.19	-	10.61	17.8
Christmas (11 Oct 1755-5 Jan 1756)	4.32	-	18.5	22.82
Total	14.31	13.4	93.75	121.46
%	12%	11%	77%	100%

Whilst the total of duties paid on outward bound traffic amounted to about £121 Sterling, total yields of customs (including bonded payments) for both Port Glasgow and Greenock amounted to £278,077 Sterling in the same year.[76] Outward duties thus represented a negligible component of total customs yields.

(b) A further component of the re-organization of 1722-24, which technically did not affect Scotland very much, comprised a reform of the duties on *coffee* and *tea*. If warehoused after securities for payment of the duty had been given, coffee and tea only paid a fraction of their import duties, as long as they remained in the warehouse. If they were to be delivered out for domestic consumption, they became liable to the full amount of the new *Inland Duty on Coffee, Tea and Chocolate.*[77] Tea, the importation of which was limited to members of the EIC and to the Port of London, could not be imported legally through Scottish ports. For coffee, however – given a valuation of £2 16s per cwt f.o.b. in the post-1755 Scottish ledgers – this tax (at 1723 rates) would have increased nominal taxation to a multiple (at least four times) of its *f.o.b.* value. But neither tea nor coffee were of real significance for the *legal* trades of Scotland.[78] In general therefore, the "re-organization" of the customs in 1722-24

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75 Author's own calculations based on disaggregating of the single column "Add. Duty on Coals, Subsidy Outwards".

76 NAS, E501/48.

77 Crouch, *View* (1755), p. 70f., p. 105. This system replaced the old drawback-scheme which was thought to have been too susceptible to frauds by the high level of duties imposed in either case. After the introduction of the new duty, one *cwt* of coffee imported paid £1 13s 6d at importation, if it was brought into the warehouse straightforwardly. Every *cwt* taken out of the warehouse for domestic consumption would pay the remaining sum of £8 16s Sterling. This sum was not charged upon re-export but out of the £1 13s 6d Sterling paid down on import, only £1 10s 2d were repaid on drawback. Thus, in exact terms the net duty on coffee imported and designed for re-export remained £0.17 or nearly exactly 3s 4d, which is one eighth of the sum paid down on entry or the sixtieth part of the bonded sums payable in theory, if all the coffee would have left the warehouse for domestic consumption.

78 Although there was at least one "coffeehouse" in Edinburgh in 1707, coffee probably made no significant socio-economic inroad in Scotland during the eighteenth century. Tea did so, but only

represented a phenomenon of comparatively minor significance for Scotland's commercial history and political economy.

These English regulations, from Mayday 1707 onwards applicable in Scottish outports as well, played a considerable part in eighteenth-century Scottish commercial and economic development, as they co-determined a characteristic and particularly Scottish trade pattern.

within a commercial framework which at that time was deemed entirely illegal – most of it was obtained from the Swedish East India Company in Gothenburg. See discussion in ch. 4, section 4.3.4 below.

2.2 *Possible Effects of the Taxation Regime on the Profitability of Foreign Trade: Did the English Customs System co-determine the Scottish Trade Pattern?*

The following sections will examine a few technicalities (2.2.1-3), as well as one unintended side-effect (2.2.4) of the English customs system, which are all of paramount importance when it comes to explaining the emergence of the quite particular eighteenth-century trade pattern of Scotland.[79] Over the period Scotland's overseas trade was characterized by an exceptionally high propensity to smuggle, coupled with a considerable bias towards re-exports, mainly of tobacco (about 56 per cent of total Scottish exports were re-exports, 80 per cent of which was tobacco). It will be argued that this was partly a result of some technical details of the English customs system imposed in 1707, which will be discussed in the following sections. First, as has been shown in the previous section, the effective level of duty on (retained) colonial tobacco was lowered in 1723. But secondly, effective tax rates were moderate in general, yet exceptionally high in few cases, most notably tobacco (2.2.1). The admittedly extraordinary rates on colonial foodstuffs such as sugar, tobacco and rice, created, by virtue of large draw-backs of import duties, an incentive to re-export these goods, rather than selling them (via legal channels) within Britain (2.2.2). The possibility to bond parts or the entire sums of customs duties upon unloading provided the opportunity of keeping the larger merchants' cash flows in motion at times when they were most likely to default on other obligations and their businesses were most susceptible to collapse (i.e. the time when the intended re-exports were declared as imports into Britain and became liable to duty). This further increased the incentives of re-exporting these goods (2.2.3). Lastly, the extraordinarily high rates on retained colonial non-essentials, most notably tobacco, which was taxed at well in excess of 220 per cent of its value (f.o.b.) in 1755,

accounted for an increased and in comparison quite remarkable level of smuggling in supplying the domestic market (2.2.4).

2.2.1 The Legal Trades (i): Effective Tax Rates

Even though scholars are usually disinclined to view "Mercantilism" – one concept amongst others that stood behind the design of the English Restoration Customs (1660seq) – as a particularly coherent theoretical approach towards economic policy[80], there was a rationale behind the system which not only followed a distinctive and overall coherent agenda, but also co-determined, even stimulated the emergence of a particularly Scottish overseas trade pattern.

On the one hand the English customs system had become exceedingly complex as early as 1707. A common complaint of overseas merchants at the time under consideration ran as follows:

> For the Customs are now really become a perfect Science, there having been no less than thirty-five additional Branches, or particular Duties imposed since the Restoration of King *Charles* the Second; and the Laws prescribing the Manner and Means for the levying and collecting of those Duties, with those have been found necessary to have been made for the Preservation and Security of the Revenue in general, within these 50 Years past; have so increased the Number, that the Body of Custom-Laws is now swelled to above ten times its former Bulk. Therefore, as they are so numerous, and many of them often made with an Eye only to some particular Purpose without regard to the Circumstances and Regulations prescribed in former Acts, it must naturally happen, that they will sometimes very much clash and interfere, so that in many Cases it is very difficult to fix a particular Point: and as the Repeals, Expirations and Revivals of several Acts are so frequent, that it is often difficult to know whether a Law is in force, or not; it is no wonder that they are no better understood by too many, whose Business is to execute them, and much less by most others, whose Interest is to know the Privileges to which they entitle them, and the Penalties to which they subject them; that they may reap the Benefit of the one, and avoid the Punishment of the other. [81]

79 Chs. 4-6.
80 See collection of essays in D. C. Coleman (ed.), *Revisions in Mercantilism* (London, 1969).
81 Crouch, *View* (1755), p. viif.

The interesting aspect of the above comment is that it is not a lament about the level or absolute burden of taxation as such, but rather the *complexity* of the system, which could lead to a considerable degree of uncertainty on the part of the merchants as to the actual liability for their cargoes. Without doubt there were always incentives for merchants to evade payment of duties regardless of the particular size of the liabilities, even though the tax burden on imports was not extreme in general as will be shown below. On the other hand it can be demonstrated that Scots traders could draw significant advantages from trading *legally* within this institutional framework initially set by the English (and after 1707 British) Customs system.

Effective tax rates[82] for the more important commodities in Scottish trade normally ranged between 6 and 34 per cent (here: of the goods' value in 1755).[83] In the present example they are on the higher margin, as the "prices" used in the present calculation for imports are f.o.b. valuations, derived from the official overseas trade statistics (c.i.f. prices would be more desirable).[84]

82 Effective tax rates have been obtained by expressing net liabilities in 1755 (sum of all applicable duties in £Sterling on the commodity under consideration, minus discounts where applicable) as a share of the respective goods' 1755 f.o.b. valuation in the Scottish ledgers of imports and exports (TNA, Customs 14).

83 As there is no firm evidence on the structure and development of prices for commodities entering Scotland's overseas trade in the period, other than the relative prices employed in the inspector general's trade statistics (TNA, Customs 14, to be discussed *en detail* in chapter 3 below), the latter have been used as price evidence in the calculations of net tax rates.

84 P. Deane and W. A. Cole, *British Economic Growth 1688-1959. Trends and Structure* (Cambridge, 2nd ed., 1967), p. 318.

Table 5: Net Tax Expressed as Percentage of the 1755 "Official" Import Valuation for Select Imports
Goods valuations: TNA, Customs 14, Ledgers of Imports and Exports, Scotland, 1755, "estimate of first cost or value" (=f.o.b.)
Duties: "net duties" tabulated in H. Crouch, *A Complete View of the British Customs* [...] (5th ed. London, 1755)

Commodity	Measure	Net Duty as % of Official 1755 Valuation
Tobacco (British plantations)	lb	220%-244%
Muscovado (Brit. Plantations)	cwt	19%
Muscovado (foreign)	cwt	60%
Rum	gallon	15%
Flax	cwt (112lbs)	free
Narrow German / etc.	120 ells	16%
Plain Irish	120 ells	free
ordinary deals (< 20ft)	120	16%
Mahogany	ton	8%
Iron: bar iron	ton	24%
iron: old (bushel)	ton	10%
Salt: Spanish	wey	81%
Salt: French	wey	59%
Pitch / tar (Brit. Plant.)	last	6%
Ashes: pearl ashes	barrel	31%
Ashes: pot ashes	barrel	34%
Horses	head	26%
Cowhides	piece	3%
Calf skins	piece	4%
Whale fins	ton	19%

With the exception of tobacco, these do not appear to be extremely high rates, especially vis-à-vis the fact that the calculation is based on f.o.b. valuations, but also given that many important commodities such as flax, linseed and madder, significant inputs to Scotland's expanding textile production, were completely freed from import duties.

The system, however, also contained one notable imbalance, which is significant in terms of the overall argument, i.e. Scotland's commercial trajectory, 1700-1760. Throughout the period under consideration duties on most goods were still computed on the basis of 1660 valuations. This taxation and valuation schedule became increasingly obsolete, as with a progressive increase in imports and consumption levels of tropical non-essentials such as tobacco and sugar for instance,

real prices for these products declined accordingly all across Europe, 1660-1760.[85] The effective net tax rate on *tobacco*, with its official rate of value and duty remaining literally constant, but its market price falling, rocketed over time. In 1755 the duties on tobacco amounted to 5d 2 farthings per lb. At the applicable 1660 valuation of 20d per lb this would have worked out at an effective net tax rate of 28 per cent. But given the *f.o.b.* valuation of 2d 2 farthings per lb in 1755, legally imported tobacco retained for domestic consumption was taxed at >220 per cent instead, making this product unaffordable for all but the higher classes of society, if legally imported and retained for domestic consumption within Britain.

This situation increased the incentive to re-export legally imported tobacco and to resort to undeclared (illegally imported) tobacco for domestic consumption. A note produced in the wake of an official enquiry launched by the Treasury into fraudulent practices in Scottish ports in 1732 put it thus:

> [I]t appears that at a Medium of Seven Years, little above 300 hhds of Tobacco pay duty each Year, tho the real quantity consum'd in Scotland is probably ten times as much, and by Accounts now before Us It appears that near the Quantity of 300 hhds have annually been sent from Scotland to England for four Years past Ending 1st May 1732. So wide a difference betwixt what Tobacco does actually pay Duty and what ought to do it, arises chiefly as We apprehend from the following Causes,
>
> From the high Duty with which it is Charg'd at Importacon, and from the Allowing the Repayment of the whole of it upon Exportacon: A double opportunity & temptation is hereby given to defraud the Revenue, and Experience Shews that any Trade (how unlawfull soever it may be) will be attempted, where the Reward of Success is so very considerable.
>
> So long a Term as three Years being Allow'd by Law for Exportacon , gives the Merchant an Opportunity of Cancelling Bonds for the first Years importacon by the 2nd & 3rd Years Importacons, whence it follows That They have the Use of Large Sums of publick Money to drive a Trade with, seeing they rely on New Importacons, wherewith to cancell their Bonds on former Ones.
>
> The great disproportion there is betwixt the value of Tobacco in Holland & the Duty of it here, is also an Encouragement to the running of it from thence, that

85 Due to changing patterns in demand, especially tropical non-essentials such as tea, sugar and tobacco experienced a marked fall in their price between 1660 and 1760. But (in the case of tea) this price decline was more pronounced after 1850. Pomeranz, *Divergence*, p. 117.

> Commodity which pays 4 ¾ p. lib. duty in Britain being comonly sold there from 1 ½ to 2 ½ p. lib.[86]

But whilst this appears to be as lucid as concise a description of early eighteenth century Scottish commercial practice through illegal channels, it also formulates in a nutshell the other side of the coin: the possible *incentives for legal trading* of the item. As hinted above, these aspects are of paramount importance when it comes to a balanced understanding of contemporary trade statistics and their possible downfalls and biases[87], as well as the discussion of the Scottish overseas trade pattern.[88] These incentives will be discussed by highlighting two particularly significant technicalities and procedures relating to the re-export trades: the draw-back system and bonding scheme.

2.2.2 The Legal Trades (ii): The Draw-back System

Under the British customs system re-exports regularly drew back significant shares of customs duties paid upon import, provided that (a) the importers, their ships and the ships' crews were deemed British denizens[89], (b) the commodities had either originated within the British plantations or were shipped from their point of production directly to Britain without previous re-landing, and (c) the commodities concerned left Britain no later than three years after their importation. By providing near-free of charge access of the eighteenth century "cash crops" (sugar, tobacco, coffee, rice), the English customs system thus effectively encouraged the transit trades. This aspect is often overlooked in the discussions about the role of smuggling in the tobacco trades, as smuggling was not the only or most profitable branch of the tobacco trades.[90] The only cost factors the large overseas merchants had to take into

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86 TNA, T36/13, Pt. 2, *Account of Gross and Net Produce on Tobacco Imported Into Scotland, 1724-1731.*
87 Ch. 3.
88 Chs. 4-6.
89 This requirement was fulfilled if more than 75 per cent of the crew were British.
90 Many of the declared tobacco and sugar cargoes actually reached their declared destinations on the continent after all.

account in these trades were non-refundable customs duties, fees for handling and warehousing and the usual "transaction" costs arising from transportation in general (shipping, insurance etc). Given the large profit mark-ups (of up to 100 per cent as suggested for tobacco at certain times[91]), trading goods from outside Britain which were by Navigation Law largely restricted to British carriers, most certainly was at least as, if not much more, profitable than trading products that had originated within the Scottish economy. Profit margins more than made good for the 12 to 14 per cent of non-refundable customs duties that remained after the rest had been "drawn back".

Table 6: Refund ("draw-back") of Customs Duties if Commodity re-exported within Three Years after Importation (% of total sum charged on import)

% of total Re-X	1708	1715	1725	1731	1738	1745	1755	1770
	Langham	Langham	Crouch	Crouch	Crouch	Crouch	Crouch	Baldwin
Tobacco	79%	91%	99%	100%	100%	100%	100%	100%	100%
Muscovado	5%	78%	79%	79%	79%	79%	79%	85%	89%
Narrow German	5%	86%	86%	86%	86%	86%	86%	89%	82%
Rice	3%	88%	87%	87%	87%	87%	87%	90%	90%

Duties per lb / cwt, rates as if all customs duties were paid down by British denizens, commodities imported in British ships, sums paid in ready cash immediately after declaration. Share in total re-exports: based on 1755-59.
Source: T. Langham, *The Neat Duties (All Discounts and Abatements deducted) of all Merchandize Specify'd in the Book of Rates* (1st ed. London, 1708, 3rd ed. London, 1715); H. Crouch, *A Complete View of the British Customs* [...], Part I (London, 1725); Id., *A Complete View of the British Customs* [...] (2nd ed. London, 1731; 3rd ed. London, 1738; 4th ed. London, 1745; 5th ed. London, 1755); S. Baldwin, *A Survey of the British Customs* [...] (London, 1770).

Tobacco after 1723 even drew back 100 per cent of duties paid upon import. Its re-export trade, characteristic for Scotland's eighteenth-century commercial pattern, became especially profitable after the 1730s, when the grip of the Customs on Scottish illegal trading activity tightened (and from the Treasury's point of view became more effective), and accordingly the risk premium of smuggling and supplying the *domestic* market with illegal imports, compared to supplying foreign markets legally, considerably increased.

Whereas around the middle of the century one *lb* of British plantation tobacco could cost as little as 1d (or less) f.o.b. or "ex works", i.e. at the pier in Virginia or

91 J. M. Price, *Capital and Credit in British Overseas Trade: The View from the Chesapeake 1700-1776* (Cambridge, Mass. - London, 1980), App. A (pp. 149-151). Cf. valuation differential for tobacco (imported, re-exported in time) in TNA, Customs 14, which is also 100 per cent.

Maryland, it sold in Britain, if retained for domestic consumption, for close to 10d per lb[92], chiefly due to the already mentioned high net tax rate on retained tobacco (of 220 to 240 per cent). If re-exported to continental Europe on the other hand, the *f.o.b.* (Britain) price of 1 *lb* of re-exported British plantation tobacco at the same time is unlikely to have exceeded an upper ceiling of 5d per lb. This value already included a 100 per cent seller's mark-up (shipping costs not considered), as all the duties could be drawn back, if the tobacco had been legally imported.[93] Sugar, German linens and rice present similar, yet less extreme cases, with drawbacks ranging from 78 to 90 per cent of customs duties paid (Table 6 above). Therefore, the overall impact of the draw-back scheme was certainly a powerful one, especially after the efficiency of the Customs in cutting down smuggling levels increased. This system of taxation, by encouraging re-exports and inhibiting the retaining of tobacco for domestic consumption, as foreign markets could be catered for at prices far below the possibly prevailing "legal" British level, thus stimulated sales abroad whilst still allowing generous profit margins at lower risk.

The crown however, gained its share by charging a premium on import duties if the sums could not be paid down in ready cash. They then had to be bonded. As bonded customs liabilities were generally higher than duties paid in cash, but the draw-back, which was calculated based on the import rates obtaining for duties paid immediately and entirely in cash, remained constant in either case, the Crown therefore retained a small and non-refundable difference on draw-backs granted on bonded customs duties (plus interest accruing on the principal). It is obvious that this aspect particularly favoured large merchants and firms who were able to advance

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92 This is borne out by some contemporary evidence. E.g. 6 hhds of tobacco sold by Thomas Douglas (Montrose) to Stephen Mitchell (Linlithgow) at £190 6s. A conservative estimate of 1,000 lbs per hhd would yield an average price of 8d per lb (which would probably have been larger, as hhds frequently weighed less than 1,000lbs). NAS, GD215/184, *Assignation by James Mansfield & Co. to Allan Clark, writer in Edinburgh for part of a sum payable to Thomas Douglas in Montrose for six hhds of tobacco* (9 April 1754). NAS, E504/24/3 (customs accounts Montrose), IV/1754, Goods Imported (ex warehouse), Nr. 21; I/1755. 240 hhds containing 212,614 lbs were sold as part of the liquidation of Thomas Douglas & Co in 1755 out of the King's Warehouse in Montrose for £940 2d, yielding an average of 1.05 d per lb. Total duty payable on tobacco retained for domestic consumption was £5,433.47, which yields an average price of 7.184 d per lb for this tobacco, excluding mark-up.

93 In the inspector general's ledgers (TNA, Customs 14) 5d per lb was the average price employed as a valuation for tobacco re-exported in time.

large sums in cash out of their own pockets, and thus might have encouraged an increase in the degree of concentration in the colonial trades.

2.2.3 The Legal Trades (iii): Bonded Customs Duties

In general, the British customs system permitted parts of the duties due upon import to be "bonded". Being a promise to pay a certain amount of cash at a specified later day plus interest on the principal for the time specified, a bond represented a letter of credit issued by the Crown to a merchant upon importation of a certain cargo in lieu of cash payments towards the applicable customs duties. Upon re-export of the cargo, the sums stated on the bond were "refunded", i.e. set against the draw-back the cargo was entitled to. Cash would only change hands for the remaining difference between the sums stated on the bond, plus interest that had accrued meanwhile on the one, and the possible draw-back of customs duties on the other hand. As discounts were given on customs duties paid in cash, but draw-backs were calculated on the basis of nominal (i.e. pre-discount) liabilities, a positive difference of about 11 per cent remained in most cases, representing the net income of the state from this type of transaction.[94]

The nature of such an eighteenth-century bond can be grasped from a blank form to be used for this procedure, which was handed out to the newly appointed customs officials in Scotland in 1707 (Appendix A 3). According to this example two fictitious merchants (James Stuart, James Lee), importing 20,000 lbs of tobacco in company at Leith, shipped in the *William* of the said place, were "bound" to the Customs (i.e. provided a bond) for a sum of £79 3s 4d Sterling, arising from the liability to the *Additional Duty* of 1d per lb minus four per cent discount.[95] They received – in this case interest-free – credit over nine months, provided they paid up

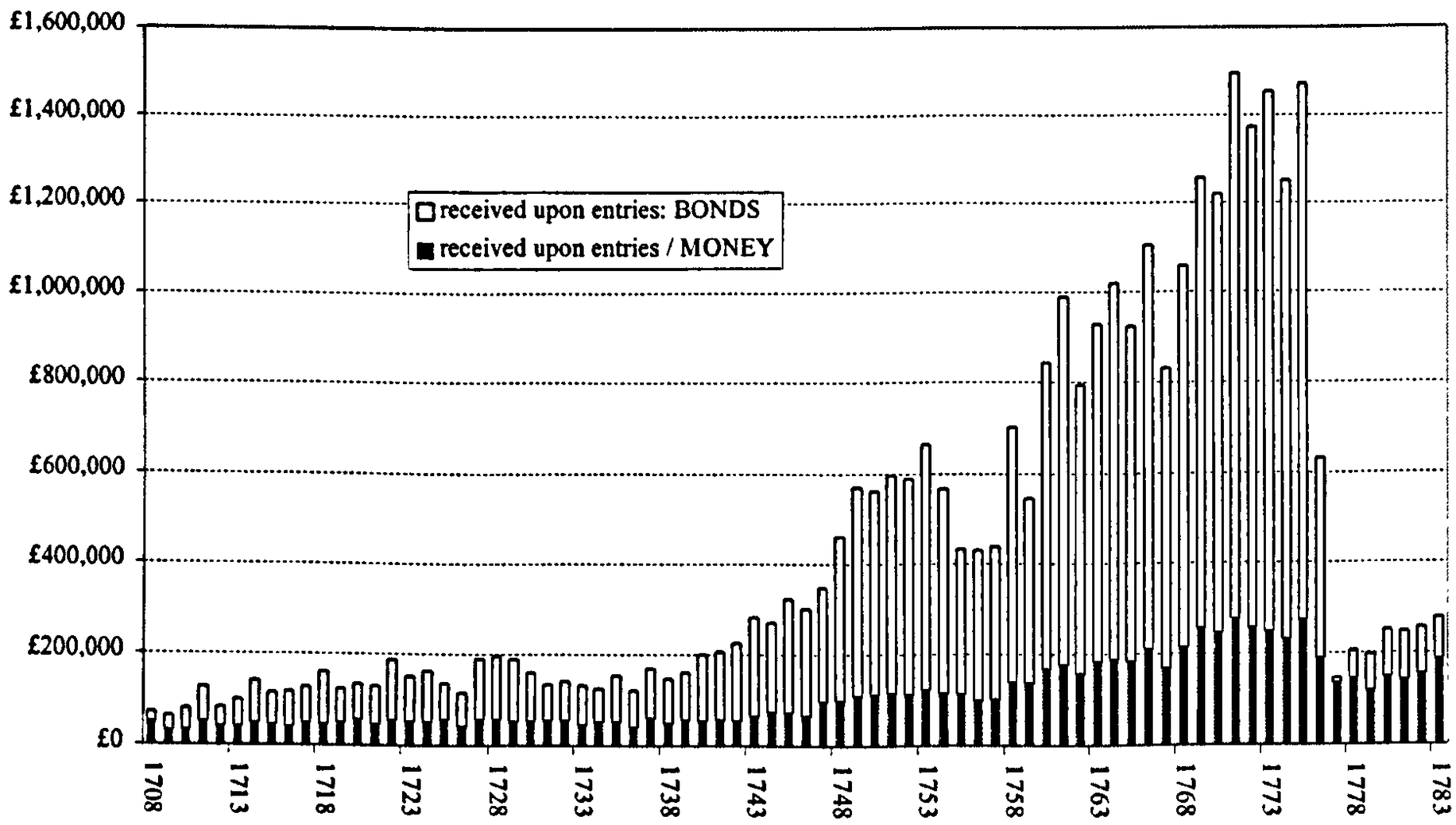
94 The difference between the liabilities if paid in cash vis-à-vis "bonded" customs duties could amount to 11 per cent (of the sums paid in cash) in the case of tobacco. Calculation based on 50 hogsheads containing 20,000 lbs as in: NAS, CE7/11, App. Nr. 29/2; see also Nr. L. Cf. also E. E. Hoon, *The Organisation of the English Customs System 1696-1789* (Newton Abbot, 2nd ed., 1968), pp. 256-264.

95 20,000*£1/240=£83.33 (£83 6s 8d) Sterling, disregarding possible discounts.

the principal. (Otherwise the interest rate would have worked out at 100 per cent as stipulated in the first paragraph of the bond.)

Bonds had been developed by and were familiar to the English Restoration customs system (1660).[96] In eighteenth century Scotland, payments of duties on tobacco imports were in fact mostly bonded rather than paid in cash (apart from one half of the Old Subsidy until 1723). Particularly in Glasgow bonds accounted for the major share of customs duties booked to the credit side of the *Customs General Accounts* (Figures 4, 5 below).

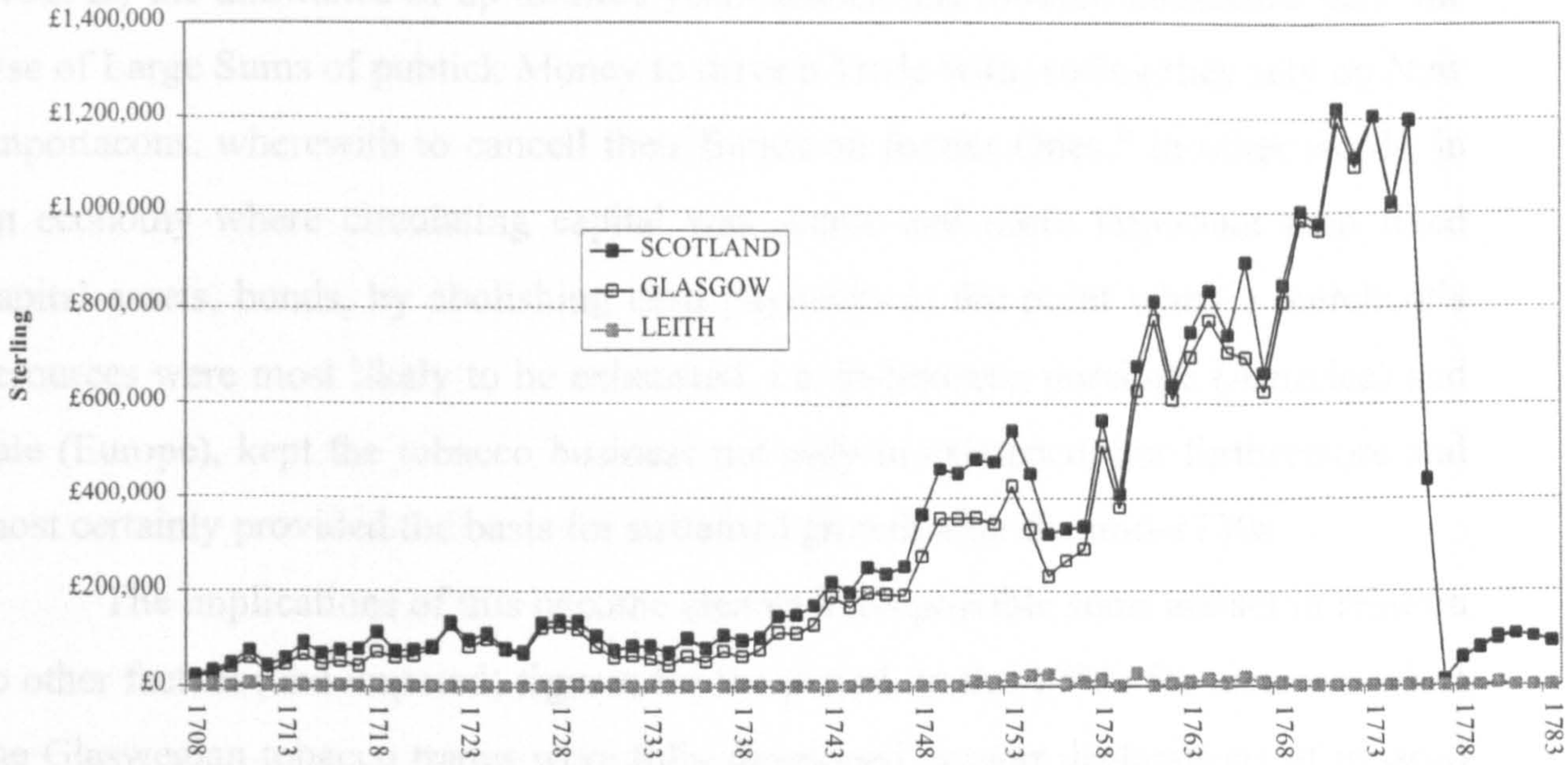
Figure 4: The Development of Bonded Customs Duties and Liabilities Paid in Cash, 1708-1783 (Totals Scotland)
NAS, E501/1-76



The development in bonded payments, which increased considerably after 1740, mirrors the rise of the Glaswegian tobacco trades. Bonded payments for instance increased continuously since the mid-1730s and collapsed precisely at the time of the War of the American Independence.

96 They were subject to frequent defaults during downturns in the business cycle. J. M. Price, "A Revolution of Scale in Overseas Trade: British Firms in the Chesapeake Trade, 1675-1775," *JEcH*, XLVII (1987), pp. 1-43, at p. 17f.

Figure 5: The Development of Bonded Customs Duties: Glasgow and Leith, 1708-1783
NAS, E501/1-76



The graph on bonded Customs yields in Glasgow mirrors figures for total Scottish tobacco imports (of which around 90 per cent normally went via Glasgow)[97] over the period under consideration. It is also a powerful token of the irrelevance of Scotland's third-biggest port (after Greenock and Port Glasgow), Leith, for Scotland's colonial trades.

In the eighteenth century, the option of giving bonds in lieu of cash extended to the majority of commodities listed in the Book of Rates. This system took into account that many commodities were liable to a plethora of duties (at one point up to 16), the total amount of which might easily exceed the liquidity (or liquidity preference) of a merchant at the time of importation. Even though duties were partly refundable upon re-export, the merchant was at the point of declaring an import liable to the entire nominal sum upon discharge of the cargo, as though the commodities were to be retained for domestic consumption. But without doubt bonds were a phenomenon primarily connected to the re-export trades. This is immediately apparent if one considers the cargoes and amounts, as well as the commercial practice and patterns involved. A bond was a form of commercial credit, as it kept a steady credit flow in motion and provided a commercial lubricant to what was to become Scotland's biggest business in the pre-industrial period. One can only re-

97 To be discussed in ch. 4 below.

iterate what the above-cited memo of the Edinburgh customhouse officials stated in 1732. By the allowance of up to three years *usance*, the tobacco merchants had "the Use of Large Sums of publick Money to drive a Trade with, seeing they rely on New Importacons, wherewith to cancell their Bonds on former Ones." In other words, in an economy where circulating capital was scarce and more important than fixed capital assets, bonds, by abolishing cash payments at the point when a merchant's resources were most likely to be exhausted, i.e. in-between purchase (America) and sale (Europe), kept the tobacco business not only in existence, but furthermore and most certainly provided the basis for sustained growth after the mid-1730s.

The implications of this become clearer if the possible sums are set in relation to other factual (and imputed) figures for the period. In the 1750s for instance, when the Glaswegian tobacco trades were fully developed, import declarations of tobacco cargoes totalling 50,000 lbs on one merchant's or firm's account were not uncommon.[98] A tobacco cargo of 50,000 lbs would have been liable to a net duty of £1,145 16s 8d Sterling. This figure would have roughly equalled 95 times the (imputed) English per capita national income in c. 1750, about 23 times the yearly salary of one riding excise officer, 13 times the yearly salary of one excise supervisor, about ten times that of an itinerant excise collector and about eight times the yearly salary of Archibald Campbell, the first Scottish inspector general of imports and exports.[99] All of these were people who earned incomes far in excess of most of their fellow countrymen. Especially in the colonial trades, which were dependent on an intrinsically linked import and re-export business, the sums involved in import declarations would in fact have exceeded the liquidity of all but the richest contemporaries. The latter could afford to advance the totals in cash and thus save on interest payments, enjoying otherwise inapplicable discounts on customs duties which they would have to pay and forego (discounts) if they chose to

98 Cf. any of the customs accounts of Port Glasgow (NAS, E504/28) and Greenock (NAS, E504/15).

99 Figures for English per capita national income: Deane & Cole, *Economic Growth*, p. 64, Tab. 3.1; p. 156, Tab. 35; p. 279; p. 282, Tab. 72; and L. A. Craig and D. Fisher, *The European Macroeconomy. Growth, Integration and Cycles 1500-1913* (Cheltenham - Northampton, 2000), p. 164, Tab. 7.6; p. 167, Tab. 7.8. Salary of Excise officers: Brewer, *Sinews*, p. 108; Salary of the Scottish inspector general of imports and exports: NAS, CE1/8, Minute of 31 December 1754, and TNA, T1/447/242-243 *Memorial of the Commissioners for Managing His Majesty's Customs in Scotland*.

bond part of the duties.[100] The incentive to provide bonds in lieu of cash payments is therefore immediately evident; often it would have arisen out of pure necessity.

It should be noted with regard to the discussion of the statistical sources (chapter 3), that even though bonds refer to virtual payments, the preceding remarks alter nothing in terms of the usability of those statistics for an economic analysis of commercial fluctuations. Bonds are *virtual* payments but refer to *real* commodity (import) flows.[101]

In this way the particular mechanism applicable in the importing procedures for colonial goods proved beneficial to the development of the re-export trades, in particular tobacco, which drew back up to 100 per cent of the duties payable on import. It is easy to see how trade was channelled towards the most profitable transit commodity of her time, as well as encouraging a development towards concentration (firm scale) in the colonial trades, due to the particular credit mechanism in operation. The domestic economy had nothing to offer that was nearly as profitable, i.e. had a similarly large profit margin as tobacco.

Another major branch of eighteenth century Scottish commercial activity that was also co-determined by the newly-imposed institutional superstructure was smuggling.

2.2.4 Illegal Activity

Scotland had a reputation for smuggling, initially of spirits, tea, and tobacco, not only in the re-export business, but in particular with regard to supplying the domestic market. This was another direct consequence of the imposition of the English customs system in 1707. The smuggling activities in the tobacco trades have received due attention and fair discussion elsewhere.[102] But some general comments on illicit

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100 Price, "Excise Affair," p. 264.

101 Bonded payments are "virtual" only in the sense, as, apart from the difference due to the interest charged, the sums stated on them never remained (deducing the discounts) on the "charge" (or income) side of the Exchequer accounts if the goods concerned were re-exported. They nevertheless refer to real commodity flows (imports).

102 E.g. W. A. Cole, "Trends in Eighteenth Century Smuggling," *EcHR*, Second Series, X (1957/58), pp. 359-410; R. C. Nash, "The English and Scottish Tobacco Trades in the Seventeenth and

trading activities in general, with particular relevance to the emergence of Scotland's eighteenth-century trading pattern, are necessary.

The implementation of the high-powered English taxation regime in Scotland in 1707 can, from the modern point of view at least, be viewed as an *a priori* hazardous political task.[103] Without doubt the Scottish economy in 1700 operated at a stage of economic development and per capita national income that were almost certainly, presumably decidedly, lower than England's and closer to continental European than to English standards (chapter 6). Whereas English foreign trade had not and would not suffer severely from the continuous increase in real taxation since 1660[104], for Scotland, the introduction of the English system of taxation might well have acted as an effective barrier to trade and economic activity. Furthermore, the English Restoration customs system was in many ways, particularly in terms of its socio-economic design, already obsolete in 1707, even with regard to a relatively under-developed economy such as Scotland. As long as a static pattern of social stratification prevailed, this logic of taxation was well-adapted to a conception of a "just" society and state. In the case of consumption goods, higher customs duties applied to what were in the strictest sense non-essentials or "luxuries", such as tobacco, sugar, tea, spices and exotic fruits.[105] As long as these products were luxuries, it was only fair to tax them heavily, as those able to afford the items in the first place would also be able to bear the additional financial burdens of taxation. Whilst within this institutional conception there was no space for the labouring classes indulging in Virginian tobacco, sipping Chinese tea, sweetened with West Indian sugar, reality in 1700 had long overtaken this concept of society and its

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Eighteenth Centuries: Legal and Illegal Trade," *EcHR*, Second Series, XXXV (1982), pp. 354-372.

103 R. Scott, The Politics and Administration of Scotland 1725-1748 (University of Edinburgh PhD Thesis, 1981), ch. 2; Hoon, *Customs*; F. B. Wilkins, *Scottish Customs & Excise Records With particular Reference to Strathclyde from 1707 Onwards* (Kidderminster, 1992); Graham, *Maritime History*; Brewer, *Sinews*.

104 R. Davis, "English Foreign Trade, 1660-1700," *EcHR*, Second Series, VI (1954), pp. 150-166; Id., "English Foreign Trade, 1700-1774," *EcHR*, Second Series, XV (1962), pp. 285-303. For the development of taxation, cf. Id., "Rise of Protection".

105 Initially these had been the subject of fierce debates amongst the learned and idle strata of society on luxury and the dangers related to these forms of consumption if permeating into the lower classes. Such a "learned" debate was carried out with regard to tea in the *Scots Magazine* in 1744. *Scots Magazine*, various monthly issues in 1744. I am indebted to Ms Steffi Metze, Aberdeen, for bringing this point to my attention.

institutional ramifications. Even in Scotland, the consumption of commodities such as tobacco, sugar and tea permeated into the lower strata of society early on, i.e. diverged from being pure luxuries to more and more adapting the characteristics of items of "mass consumerism".[106] As these products were taxed excessively on the other hand, the common folk resorted to chiefly illegal supply channels. Accordingly, the prevailing moral perception of the common people held the English taxation regime that became applicable in Scotland as of Mayday 1707, to be thoroughly unjust.

This is borne out by observations on the role and perception of the smuggler in Scotland's eighteenth-century economic and social life or "culture" in the generic (i.e. Freudian) meaning of the term. Whatley has demonstrated that Scottish society in the early decades of the eighteenth century was particularly inclined to social unrest, mainly food riots and acts of violence that were frequently directed against Customs and Excise officials.[107] Whilst it is no coincidence that social unrest clustered in years and decades that were marked by downturns in the business cycle (e.g. 1724-5 and 1740-1), a general hostility towards the taxman seems to have been inherent to Scottish national and social identity in the first half of the eighteenth century. The non- and black-market economy attained considerable dimensions. The smuggler represented an established institution in Scottish socio-economic life, or, as Whatley has put it:

> There is here, as in the bulk of the popular disturbances concerned with food examined, evidence of the notion of 'entitlement', of the right to an adequate supply of the means of subsistence at reasonable prices; that is, without the imposition of additional costs imposed by the state [...].[108]

With regard to the tea running business c.1740-1780, Mui and Mui have pointed out that

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106 Causing also a considerable amount of mental unrest on the part of the learned and better-off upper classes who saw one of their major tools for implementing social exclusivity being steadily eroded. C. A. Whatley, *Scottish Society. Beyond Jacobitism, Towards Industrialization* (Manchester - New York, 2000), p. 75f. See also ch. 4.

107 These riots were not always spontaneous or unorganized. Whatley, *Scottish Society*, chs. 4, 5, esp. pp. 170-4, pp. 184-196.

In Scotland the transportation of illicit tea to the wholesaler's shop was done with the ease and regularity of a legal business. From the coast tea was dispatched inland to major centers [*sic*] of distribution by land carriers in groups of thirty to fifty men. The shipping and other charges on tea ordered abroad by Edinburgh merchants included delivery to their warehouses; tea for Glasgow was deposited in safe hiding places two miles outside of town.[109]

The infrastructure of this business comprised not only large paramilitary gangs but also armed ships owned by the smugglers, who made sure that an increasing demand of the Glaswegians and Edinburgh-ians for tea, reflected in regular bulk orders by the larger urban grocers, would always be met at prices well below those quoted for officially supplied English East India tea, 1740-1780.[110] The story of domestic supply of tobacco was similar.[111] As seen above, contemporaries were convinced that actual imports of tobacco into Scotland far exceeded the declared amounts, which were largely destined for the re-export trades. Modern research has established that in the first three decades after the Union only half of total tobacco imports into Scottish ports were taxed.[112] It is clear that not all of these undeclared cargoes were destined for export. Often they were declared as exports and re-landed subsequently; or incoming ships would be cleared at night at obscure places, and the tobacco would be brought on to the domestic market directly. In either case the domestic population was mostly supplied via illegal channels. The same applied to the tea trades.

The preceding aspects had considerable consequences on the structure, pattern and development of Scotland's *overseas* trade in the period under consideration. The particular taxation regime imposed on Scotland by virtue of the Act of Union in 1707 thus co-determined the characteristic Scottish overseas trade pattern, which was geared towards the re-exportation of tobacco and other

108 Ibid., p. 198.
109 H.-C. Mui and L. H. Mui, "Smuggling and the British Tea Trade before 1784," *American Historical Review*, LXXIV (1968), pp. 44-74, at p. 63.
110 Ch. 4.
111 Ch. 4, section 4.3.2.1.
112 Estimates of early eighteenth-century smuggling range from 50 to 63 per cent of declared trades. Cole, "Trends"; Nash, "Tobacco Trades".

commodities that almost completely bypassed the home market.[113] In particular the introduction of a 100 per cent drawback on tobacco in 1723 might be seen as one prime cause for the emergence of Scotland's characteristic and very peculiar eighteenth-century trading pattern. Tobacco was in fact the only import commodity liable to duty that could draw back the sums paid upon import *in toto* upon re-export at that time. As will be shown in chapters 4 and 5, Scotland's overseas trade became biased towards tobacco and was in general more biased towards one single commodity (tobacco) than England's trade in the period. After 1736 the tobacco trades expanded at exponential rates, resulting in Scotland's spectacular tobacco trade cycle (1736-1776). Tobacco became Scotland's most important import and export commodity, accounting for up to 40 per cent of imports and re-exports.

The obvious question, why England's trade was not biased in the same way, needs to be postponed, but chapter 6 will highlight the weaknesses of the Scottish export economy and the scarcity of value-added goods that could be sold on foreign markets. In combination, the stage of development of the Scottish economy, and the customs system super-imposed upon this economy in 1707, go a long way in explaining this very peculiar overseas trade pattern. In this way it was not the mere access to the products of the English colonies overseas provided by the Union of 1707, which stimulated Scotland's commercial and economic development in the eighteenth century, but also the imposition of the English taxation framework in 1707, as well as possibly rather unintended side-effects (smuggling), which caused some peculiarities in Scotland's commercial trajectory after 1707, and resulted in a two-tiered pattern of overseas trade (the third pillar of Scottish commerce was trade with England).

It is now time to move on to a discussion of the available sources. A description of the detailed procedures of declaring a cargo in- or outwards is not necessary. It can be found in Appendix A 4. References to these practices will be made and relevant aspects explained wherever this is relevant for the discussion.

113 Chs. 4-6.

3 The Quantitative Sources Used in the Analysis of Overseas Trade Fluctuations

Following Åström one can distinguish between (a) customs accounts and (b) trade statistics.[1] For Scotland, specimens of both have survived in some form after 1742. (a) The Scottish port books or *Customs Collectors' Quarterly Accounts*, commencing 1742[2], provide disaggregate import and export declarations made by the importing and exporting merchants in each of the 28 or so Scottish outports[3] in the years under consideration.[4] Prior to 1755 they are the only source containing comprehensive information on *all* commodities shipped into and out of Scotland. After some statistical manipulation – basically the organization of single-entries into a database suitable for mathematical processing (for the present study, SPSS (R) has been chosen) – these data can be rendered useful for calculating Scotland's trade balance for select years covered by these series. (b) After 1755, aggregates for Scottish imports and (re-)exports can be obtained from the *Inspector General's Ledgers of Imports and Exports*, contemporary trade statistics which resulted from an attempt to monitor Scotland's commercial position on world markets. These ledgers contain valued aggregates for Scotland's trade, broken down by countries and commodities. The series is a virtually uninterrupted one between 1755 and 1830.[5] Aggregate figures for total trade and by countries for missing years (1763 and 1769) can be obtained from *Manuscript 60* in the National Library of Scotland.[6] The figures contained in the Inspector General's "ledgers" are, however, fraught with a variety of biases that will also be discussed below. One of the lesser disadvantages of this source is that trade is broken down by commodities and countries only, but not by ports (neither Scottish nor foreign ports). Furthermore, it is clear that severe frictions occurred in the

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1 S.-E. Åström, *From Cloth to Iron. The Anglo-Baltic Trade in the Late Seventeenth Century*, Pt. II: *The Customs Accounts as Sources for the Study of the Trade* (Helsingfors, 1965), p. 12f.
2 Christmas Quarter 1742.
3 Outport: customs precinct, comprising head port and its several creeks.
4 NAS, E504.
5 TNA, Customs 14, reproductions in: NAS, RH2/4/10, RH2/4/11, RH20/1seq. Missing years in the series: 1763, 1769.
6 NLS, MS 60, *The Value of all Goods, Wares and Merchandize Imported Into & Exported From Scotland Compared with the Excess of Each Country Commencing Anno 1755.*

precision of recording when it came to the transmission of outport data (port books etc.) to a more general level (inspector general), all of which need to be taken into account when it comes to the analysis of trade flows. Sometimes under-recording or misreporting would be so severe as to cast serious doubt on the validity of these figures. (c) Generally speaking, in Scotland, where taxation yields were low and tax evasion high during the first five decades following the Union[7], the absence of customs ledgers and other comprehensive trade statistics prior to 1755 is a clear indication of the lack of interest in Scottish affairs on the part of "British" authorities prior to the last Jacobite uprising.[8] Before that date, information was sent to and brought to the attention of central authorities (Treasury, Board of Trade) rather sporadically, mostly related to tobacco, grain, linen and wines, commodities of particular interest to the Mercantilist state.[9] Therefore the only statistics available in uninterrupted series throughout the entire century are those derived from revenue accounts, indicating yields and expenses of the Scottish Customs administration (*General Accounts* of the Scottish Customs).[10]

One qualitative remark has to be made at the outset. Anglo-Scottish trade generally ceased to be recorded after 1707. The English customs ledgers did not record these trades after Mayday 1707 any more, and the Scottish trade statistics, commencing in 1755, likewise did not include Scotland's trades with England. The abolition of taxation and recording of Anglo-Scottish trade therefore represents a serious bias of all available quantitative sources, as will be shown below, in particular since England was Scotland's most important trading partner at that time.

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7 Ch. 2.

8 The English (TNA, Customs 3) and Irish (TNA, Customs 15) Customs Ledgers commence in 1696.

9 E. g. grain: A. Bald, *The Farmer and Corn-Dealer's Assistant* [...] (Edinburgh, 1st ed., 1780), pp. 437-442. TNA, T64/274.68, Grain and Flour exported from Scotland, 1707-1766. Wine: TNA, T36/13/3.

10 NAS, E501.

Only in legal terms did these trades cease to exist and to be recorded, but in real economic terms they continued and even grew after 1707.[11] Scottish overseas trade statistics might therefore not accurately reflect Scotland's absolute and comparative advantages.

11 Chs. 4, 6.

3.1 The Port Books and Other Outport Material

3.1.1 Accounts Originating in the Outports

Even though the port books are the only source that can be rendered useful for a calculation of Scotland's balance of trade in the period prior to the commencing of the inspector general's ledgers (1755), there were a variety of other records originating in the outports that would have contained information very similar to the figures obtainable from the port books. The fact that these accounts have been mostly lost and in those cases in which they survive, by their very nature were disaggregate files assembled in bundles, requires to resort to the customs accounts for a discussion, even though, as will be seen below, the latter were by no means "true" or particularly reliable accounts of "imports and exports", as has frequently been thought.

All outport officials involved in the process of a cargo's declaration – collector, comptroller, tides-men, land-surveyors, land-waiters – had to keep their own records containing details as to commodities shipped into or out of the port and creek within the jurisdiction of the respective "outport" (Customs precinct), chiefly in order to allow for independent cross-checks.[12] The collector and comptroller each had an original set of merchants' bills (of goods' declarations) in- and outwards at hand, as well as the warrants granted upon these bills for loading (exports) or unloading (import), upon which the quarterly account ("port book") was based.[13] The land-surveyor, who (apart from the collector and comptroller) was the third person to verify the true content of the port books upon oath at the end of each quarter (before the books were dispatched to the Board of Customs in Edinburgh for auditing) did this only upon the warrants granted by the collector and comptroller.[14] He, however, kept records of the fees he had charged, which included specific details as to ship's cargoes as well, which technically enabled him to carry out an *independent* cross-

12 Appendix A 4.

13 A collection of "impost vouchers" (1750-1756), containing details as to ships' cargoes (identical to those found in the port books) of the comptroller of Prestonpans, can be found in NAS, CS96/4342.

check.[15] This situation should have resulted in the existence of about four classes of records that would contain specific references as to the composition of freights declared:

(a) Files/Book of Masters' Reports Inwards / Outwards (incl. coastal trade)
(b) Files/Book of Merchants' Reports Inwards / Outwards (incl. coastal trade)
(c) Warrants for the Unloading of the Goods
(d) Notebooks: the land-waiters' "blue book", the "jerque book" and other notes and files of land-waiters, tides-men and surveyors.[16]

Almost none of the above have survived, and accordingly, not much more than specified about their design in the customs regulations is known about them. There is only one file which clearly represents an exception, which could be traced by the present author: the bundle (or "book") of *master's reports inwards* (class (a) above) for *Prestonpans* for 1707-1716.[17] Its contents indicate that the *masters'* (ship captains) reports contained the same specific information as to the type and quantity of commodities shipped as the *merchant's* reports, on which the "port books" were based. But since port books were mere revenue accounts and thus did not contain particulars of goods on which duties had not been paid yet, such as warehoused goods intended for re-export, they are – contrary to some mainstream opinion – no true import-export accounts. Thus, an ideal research scenario would be the preservation of full sets of merchants' and masters' reports inwards and outwards, in order to amend the available port books with regard to *omitted* traffic. These problems will, *inter alia*, be addressed in the following.

14 NAS, CE60/4/10 (deposited at GCA/Mitchell Library), *Instruction Manual, Port Greenock*, 16 July 1777. NAS, E504, passim; oaths and signatures of collector, comptroller and surveyor at the end of each quarter.
15 Such a book has survived for Port Glasgow. NAS CS96/3856, William Ogilvie, land surveyor of customs, Port Glasgow. Fees collection book (1751-1754).
16 NAS, E504/15/5 (customs accounts Greenock), Goods Exported I/1752, Nr. 64, where it is mentioned that the blue books were files kept by the land-waiters. See also NAS, E504/4/2 (customs accounts Ayr), letter dated 26 July 1753, attached to the Christmas Quarter Book for 1752. Cf. also E. E. Hoon, *The Organisation of the English Customs System 1696-1789* (Newton Abbot, 2nd ed., 1968), p. 254.
17 Misclassified as "Prestonpans Custom Book", NAS, CE56/5/1.

A "port book" or collector's quarterly account originated by copying the *merchants' reports* (class (b) above) from the loose set of files, bringing them into (chronological) order, and providing a quarterly abstract of the duties paid.[18] These *Collectors' Quarterly Accounts,* or "port books" or "customs accounts", are available from Christmas quarter 1742 onwards.[19] In this way, Scotland is exceptional, even in a European context, as the eighteenth-century London customs accounts, capturing about 80 per cent of England's foreign trade, have been lost and none of the contemporary European nations normally produced records of comparable comprehensiveness.[20]

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18 This account was to be sent to the Board of Customs in Edinburgh after the end of each quarter for auditing, 14 days after the quarter had expired at latest. NAS, CE57/2/172b, *Board to Collector*, June 1708, 31 December 1708.

19 A. Murray has attributed the loss of the pre-1742 volumes to a fire in the Edinburgh Customhouse where these records were kept prior to their being transferred to the National Archives of Scotland. J. M. Price, "New Time Series for Scotland's and Britain's Trade with the Thirteen Colonies and States, 1740 to 1791," *WMQ*, XXXII (1975), pp. 307-325; personal conversation of the present author with Dr Murray. It seems as likely, however, that these files were transmitted to London in 1723 (when the Scottish Board of Customs was temporarily dissolved) and never brought back in 1742 (when it was re-established) – in particular because the available port books all begin in either Christmas 1742 or later. The pre-1742 Scottish port books might still be in London.

20 The basic difference of the British accounts to most other available material is that, insofar as foreign or overseas trade was concerned, all traffic and all commodities imported or exported was recorded, regardless whether or not liable to duty. Similar records of contemporary other nations or ports, as far as they have been traced yet, normally either (a) exist in gaps, or frequently (b) cover only imports, often (c) from a specified and limited geographic area only (e.g. Hamburg *Convoygeld- und Admiralitätszolleinnahmebücher*). (d) In general they cover only those commodities that were taxed and disregard all other traffic (e.g. Hamburg *Convoygeld- und Admiralitätszolleinnahmebücher*; Bremen *Schlachteangabebücher*, Staatsarchiv Bremen, 2-Ss.2.a.4.f.1 seq. These books recorded only imports of a very limited range of commodities that were taxable). The data contained in the *Hamburg* customs accounts have been processed and edited in: J. Schneider, O.-E. Krawehl and M. A. Denzel (eds.), *Statistik des Hamburger seewärtigen Einfuhrhandels im 18. Jahrhundert. Nach den Admiralitätszoll- und Convoygeld-Einnahmebüchern* (St Katharinen, 2001). E. Baasch, "Zur Statistik des Ein- und Ausfuhrhandels Hamburgs Anfang des 18. Jahrhunderts," *HGbl*, LIV (1929). *Lübeck*: C. Meyer-Stoll, *Die lübeckische Kaufmannschaft des 17. Jahrhunderts unter wirtschafts- und sozialgeschichtlichen Aspekten* (Frankfurt-am-Main - Bern - New York - Paris, 1989) has focused on the later seventeenth century, based on the Lübeck *Zulagebücher*. E. Harder (-Gersdorff), "Seehandel zwischen Lübeck und Rußland im 17./18. Jahrhundert nach Zollbüchern der Novgorodfahrer, Pt. I," *Zeitschrift des Vereins für Lübeckische Geschichte und Altertumskunde*, LXI (1961), pp. 43-114, and E. Harder-Gersdorff, "Handelskonjunkturen und Warenbilanzen im lübeckisch-russischen Seeverkehr des 18. Jahrhunderts," *VSWG*, LVII (1970), pp. 15-45, focus on Lübeck's trade with "Russia" (but mainly Riga, Narva, and Reval). Id., "Mitteleuropäische Gewerbezonen und ostbaltischer Handel im 18. Jahrhundert" in K. Friedland and F. Irsigler (eds.), *Seehandel und Wirtschaftswege Nordeuropas im 17. und 18. Jahrhundert* (Ostfildern, 1981), pp. 26-37. R. Hammel-Kiesow, "Hansischer Seehandel und wirtschaftliche Wechsellagen. Der Umsatz im Lübecker Hafen in der zweiten Hälfte des 14. Jahrhunderts, 1492-6 und 1680-2" in S. Jenks and M. North (eds.), *Der Hansische Sonderweg? Beiträge zur Sozial- und Wirtschaftsgeschichte der*

3.1.2 The History of the Scottish Port Books[21] in the Eighteenth Century

The history of the lost Scottish customs accounts (1707-1742) is a history of failure and complaint. Throughout the first two decades after the Union, complaints of the Scottish *Board of Customs* to the collectors in the several outports, regarding their accounts were frequent.[22] Nor is there a dearth of references to a general lack of efficiency of the early eighteenth-century Scottish customs administration on the outport level in general.[23] The most popular cause for mental unrest on the part of the *Board of Customs* was the regular occasion of collectors failing to send in their accounts in time.[24] Yet there were other aspects of these accounts which made them

Hanse (Cologne - Weimar - Vienna, 1993), pp. 77-93 briefly discusses trade in relation to the macro-economic development of Lübeck's economy in the longer run. *Bremen*: H.-J. Von Witzendorf, "Beiträge zur Bremischen Handelsgeschichte in der zweiten Hälfte des 18. Jahrhunderts," *Bremisches Jahrbuch*, XLIII (1951), pp. 342-394; Id., "Bremens Handel im 16. und 17. Jahrhundert," *Bremisches Jahrbuch,* XLIV (1955), pp. 128-174. *Flensburg*: T. Link, *Flensburgs Überseehandel von 1755 bis 1807. Seine wirtschaftliche und politische Bedeutung im Rahmen des Dänisch-Norwegischen Seehandels* (Neumünster, 1959). *Danzig* and *Stockholm* records: M. Bogucka, "Handelsbeziehungen im Ostseeraum: Der Handel zwischen Danzig/Gdansk und Stockholm in der 1. Hälfte des 17. Jahrhunderts" in K. Friedland and F. Irsigler (eds.), *Seehandel und Wirtschaftswege Nordeuropas im 17. und 18. Jahrhundert* (Ostfildern, 1981), pp. 38-47; *Gothenburg*: S. E. Åström, *From Cloth to Iron. The Anglo-Baltic Trade in the Late Seventeenth Century*, Pt. II. *The Customs Accounts as Sources for the Study of the Trade* (Helsingfors, 1965). *Riga* and *Tallinn*/*Reval*: V. V. Dorosenko, "Quellen zur Geschichte des Rigaer Handels im 17. und 18. Jahrhundert und Probleme ihrer Erforschung" in Friedland & Irsigler (eds.), *Seehandel und Wirtschaftswege*, pp. 3-25. Additionally on Riga: E. Harder-Gersdorff, "Mitteleuropäische Gewerbezonen und ostbaltischer Handel im 18. Jahrhundert" in ibid., pp. 26-37.

21 The term "port book(s)" is a label assigned to a type of records the design, appearance and purpose of which have remained remarkably immune to changes over time. A comparison between a 1706 Edinburgh port book, a port book of the English port of Berwick-upon-Tweed 1649, and any one of the post-1742 Scottish *Collectors' Quarterly Accounts* reveals at once that neither function, nor purpose, nor design of these records changed significantly during the seventeenth and eighteenth centuries. NAS, RH15/14/99 i.f.: *Port Book of Edinburgh (Leith): goods exported, duty paid, date, master, to whence exported, February 1706 – 1 April 1707, goods imported February 1706 – April 1707*; NAS, RH 4/170, Miscellaneous microform copies of TNA, E122/219 records (Exchequer series), e.g. *A List of Books relating to His Majestie's Customs and Subsidies in the Port of Berwick and Creeks and places thereto belonging*, pp.142-144, see also pp. 147-149. NAS, CE7/11, p. 31, §XI; App. No. 64-67. Discussion of similar accounts for Gothenburg and Stockholm in: Åström, *Customs Accounts,* pp. 23-26; pp. 38-40.

22 NAS, CE57/2/172a, b, *Letter Book Board to Collector,* e.g. CE57/2/172b, 31 December 1708, 14 May 1716.

23 NAS, CE57/2/172a, 8 March 1708.

24 NAS, CE57/2/172a, 8 March 1708; CE57/2/172b, 31 December 1708, 14 May 1716; CE14/1, *General Orders*, 4 August 1711.

critical from the point of view of the economic administration. In 1715 a complaint was made relating to the exact wording of the oaths to be sworn on the end of the accounts as to their true content.[25] By a general order of the Board of Customs dated 6 July the same year the collectors and comptrollers in the ports were reminded that they were to verify the information contained in the port books *independently* from each other on the basis of their own documents (warrants, bills of entry) – which is a good indication that this was in fact not what they normally did.[26] The Board's complaints and formal warnings to the collectors went on. In 1730 for instance the Board sent a letter to the collector at Dumfries complaining about his accounts and his attitude towards work, advising him to pass on the accounts in due time upon threat of cutting his salary and even dismissing him.[27] 1736 one hears of the same problem in the same port again.[28] Perhaps this was related to a generally inefficient Customs system, which appears to have been particularly pronounced in Scotland's south-western ports. An official Treasury inquiry in 1732 found that these ports had drawn an increasing share of the colonial trades, due to their administration being far more lax than in Glasgow.[29]

Without doubt the level of efficiency of the British Customs system was sub-optimal in the Scottish ports in the first half of the eighteenth century.[30] An abnormally high degree of dysfunction which cannot be called frictional (i.e. short-term, arising due to the changes in administration in 1707) but which was rather

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25 NAS, CE57/2/172b, 1st July 1715.

26 NAS, CE14/1, *Abstract of General Orders of the Honourable Board of Customs in Scotland*, 6 July 1715.

27 NAS, CE51/2/1, *Letter Book Board to Collector, Dumfries*, 20 June 1736.

28 NAS, CE51/2/1, 12 August 1736.

29 See ch. 4, section 4.3.2.1.2 below.

30 E.g. NAS, CE51/2/1, 18 September 1730, 14 December 1732. The system of checks and cross-checks, not only between collector and merchants, but between the collector and his officials (comptrollers, searchers), who were in turn supposed to carry out independent cross checks on each other, need not necessarily have to have worked well. Problems in an outport might result from persons other than the ships' master making the master's entry (e.g. the ship's mate), the collector not applying the standard procedures as stipulated in the *Instructions 1707*, or persons other than the merchants making the merchant's entries (apprentices might not know the exact content of the cargo). The evidence fits in well with Price's statement that the Scottish outports, by their prevailing and inherent lack of discipline in administrative procedures, represented a smuggler's paradise at that time. J. M. Price, "Glasgow, the Tobacco Trade, and the Scottish Customs, 1707-1730," *SHR*, LXIII (1984), pp. 1-36, at pp. 7-9.

endemic, prevailed well into the 1730s and beyond, making Scottish ports a smuggler's haven at that time.[31]

3.1.3 Design

Port books or "customs accounts" are revenue accounts, supplemented by a detailed and comprehensive list of items assessed on import and export, including those cargoes that were imported (or exported) duty free.[32] This aspect renders them – superficially – useful for an analysis of trade flows ("balance of trade").

A standard entry of an import (export) declaration in the port books contained the following information[33]:

(a) Ship's name[34];
(b) its place of build / registration (optional);
(c) port(s) or country(countries) or region(s) of last calling (destination);
(d) master's name;
(e) merchant's name;
(f) name of supercargo or forwarding agent (if applicable);
(g) the *commodities* carried:
    a. specification of material identity according to the two Book(s) of Rates;
    b. in standard commercial measures[35] (according to the two Books of Rates in use)[36];

31 See ch. 4, section 4.3.2.1.2 below.
32 Even corpses or bodies of dead persons were recorded when landed at a British port. Cf. customs accounts Leith, NAS, E504/22/6, III/1754, Goods Imported Nr. 98, Ship *Betty* from Boulogne; declaration of "One bale Contd. the Corps of Mr. Hamiltoun of Bangour, [duty] Free".
33 Cf. also NAS, CE7/11, App. Form No 3, 4, 7, 8, 26, 29; Books Nr. B, G (scheme for general merchants' entries in-/outwards). Private imports were recorded as well.
34 Information as to the size of the ship (tons), composition of the crew and whether or not guns were carried was not normally provided.
35 The Customs officials reckoned in and applied official British measures. It remains uncertain however, whether the quantities gauged and declared according to Imperial standard always captured identical amounts. Clearly the use of measures in the port books is in places fundamentally at variance with Zupko, particularly with regard to the hundredweight (cwt). All official guides to the Customs, as well as a closer examination of TNA, Customs 14, clearly state

c. amount shipped;

(h) amount of customs duties levied.

The following sections will highlight some of the more obvious problematic aspects of these accounts.

3.1.4 Declarations of the Port(s) of Origin / Destination

It is obvious that customs officials would have found the verification of a ship's true port(s) of origin or destination a much more difficult task than all other components of a merchant's declaration inwards or outwards (such as measuring / weighing the cargoes etc.). Here, however, a distinction needs to be made between trade that took place between British ports (including the colonial ports), and trade with locations outside the British dominions.

(a) Imports from and exports to places within the British Empire could be cross-checked against the original certificate (bill) of loading issued by the port of origin, which, as an identical administration was concerned, represented a fairly

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that the 112 lbs per 1 cwt ratio applied to all commodities recorded, whereas Zupko has specified deviant ratios for the ginger, gunpowder, sugar *cwt* and, as well as for the ashes *barrel*. Only in the case of victualling bills (non-commercial exports), non-commercial measures could be used in declaration of goods (i.e. "casks" of oatmeal instead of the same amount given in "quarters" etc.). H. Crouch, *A Complete View of the British Customs,* Pt. I (London, 1725; 2nd ed. 1731; 3rd ed., 1738; 4th ed. 1745; 5th ed. 1755). H. Saxby, *The British Customs* (London, 1757). S. Baldwin, *A Survey of the British Customs* (London, 1770). T. Langham, *The Neat Duties of all merchandize Specify'd in the Book of Rates* (London, 1708), 3rd ed (1715) et seq. down to 7th ed. (1754). For measures at variance with the evidence collected by Zupko see e.g. TNA, Customs 14, Exports (of British goods) to "America", 1755, entry for *gunpowder*, where the total amount of value, divided by the valuation per cwt yields a standard cwt of 112lbs. Cf. also Crouch, *View* (London, 5th ed., 1755), p. 172. *Ginger, refined sugar*: TNA, Customs 14, imports from, exports to "America" (1755); *Muscovado*: intrinsic evidence in the port books: e.g. *20.1.25* cwt, *787.3.26* cwt, and *194.0.25* of Muscovado sugar declared in Michaelmas at *Port Glasgow* (NAS, E504/28/7, III/1755, *General Goods*, Nr. 79, 82, 85). These entries rule out Zupko's suggestions as to the sugar cwt (i.e. 100lbs = 1 cwt, the quarter amounting to 25lbs). *Ashes bbl*: The Customs employed the bbl of 200 lbs for pearl and pot ashes throughout, as well as the last based upon this bbl for wood ashes (see Crouch, various edns.). This ratio can be found in TNA, Customs 14 as well (e.g. imports of potash from "Russia", 1755, cf. total amount of value with valuation and quantity given). Zupko reckons that the ashes bbl contained two cwt á 112 lbs each. R. E. Zupko, *A Dictionary of Weights and Measures for the British Isles*: *The Middle Ages to the Twentieth Century* (Philadelphia, 1985).

36 12 Car. II c.4; 11 Geo II c.7.

straightforward task for customs officials.[37] Furthermore, a special regulation applied to traffic in commodities "enumerated" in the Navigation Acts. If a ship was bound for a British plantation in Africa, America or Asia, intending to pick up a cargo of tobacco, sugar, rum etc., the merchants involved had to provide bonded securities over £1,000 (if the ship's burden did not exceed 100 tons) and £2,000 Sterling respectively (if the ship's burden exceeded 100 tons), that were cancelled only if the commodities were shipped orderly, i.e. conforming to the English Navigation Acts.[38] Much more difficult and thus critical for the present analysis, was the verification of origin (destination) for cargoes that either came from or went to a foreign (i.e. neither British nor British colonial) port.

(b) With regard to *imports* from outside the British dominions, customs officials would normally try to obtain the original bills of lading. With regard to *exports* to non-British ports it is clear that, unless confirmation could somehow be obtained by Customs officials, merchants' fantasy would be set no boundaries in their declarations of outbound cargoes. In this instance the Customs could not care less about duty free exports but were, if at all, most concerned about re-exports. As most re-exports were normally entitled to drawback (of the import duties), which made these products notoriously prone to re-landing within Britain (supplying the domestic market illegally at duty-free prices), any ship that carried high-value goods which had been declared as re-exports, was, from the point of view of Customs officials, *a priori* suspect of intended re-landing within British realms.[39] For the Customs therefore, it would have been desirable to check whether such ships really went to a foreign port. In theory, British customs officials did have this option, which they sometimes even resorted to in practice.[40]

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37 NAS, CE7/11. These papers, like anything else, could be forged.

38 These bonds became void as soon as the ship returned, provided that a direct voyage from a colonial to a British port could be proven. NAS, CE7/11.

39 As the cargoes under consideration would have drawn back all or part of the prohibitive import duties (that applied if the commodities under consideration were to be retained for domestic consumption).

40 Whereas this is unlikely to have been general practice, due to limited personal and financial resources, such cases were not unheard-of. In 1729 for example, two lesser customs officers accompanied a ship on its voyage from Aberdeen to Bergen and returned shortly thereafter, having witnessed the lawful discharge of the cargo in Norway. The officials had been ordered to attend the voyage to Bergen, as the Aberdeen collector anticipated that these goods were intended to be re-landed within Britain. The cargo concerned comprised (amongst other goods):

The preceding observations underline the large bias and high degree of unreliability of seemingly accurate customs accounts. This bias can be measured for instance by cross-checks with materials similar to the Scottish customs accounts on the other end of the trading link. There is for example a remarkable discrepancy between amounts and value of commodities declared as exports to Hamburg and Bremen in the Scottish customs accounts on the one and the corresponding records on the German side, i.e. the Hamburg *Convoygeldeinnahmebücher* and Bremen *Schlachteangabebücher* (1747, 1754, 1755).[41]

But not only are port books and other customs accounts marred by a certain degree of distortion as to the places declared; even those components of a declaration that could be counted and measured by Customs officials are to be viewed critically. This can be demonstrated by a comparison of merchants' records with the declarations those merchants made at the port and which were copied into the customs accounts. As complete sets of business records for particular firms have rarely survived, the following remarks need to remain speculative and might not be statistically relevant. Nevertheless they point towards marked weaknesses in terms of the reliability of the customs materials.

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340 ankers spirits, 107 reams writing paper, 21 half-pieces Holland linen, four Muslins, two half-pieces *Cambrics*. NAS, CE87/1/1, *Aberdeen, Letters Collector to Board*, 29 January 1729, 10 April 1729. Another (but less effective) option was to warn fellow officers in the other outports by mail, as soon as a ship carrying high value goods declared for re-export, had cleared the port.

41 Appendix A 10. This difference can only partially be explained by the fact that the Hamburg and Bremen sources only recorded taxed commodities, as many commodities declared in Scotland for either Hamburg or Bremen were taxable in the latter two places as well, but failed to reappear in the respective accounts. Other possible explanations are manifold, ranging from different or inefficient methods of taxation, re-direction of cargoes after declaration in Scotland, up to outright fraud (false declaration). Discussed at length in P. R. Roessner, *Scottish Trade With German Ports 1700-1770. A Study in Early Modern Multilateralism* (Stuttgart, forthcoming).

3.1.5 Firm's Records vs. Customs Accounts: How Useful are Port Books in Establishing Firm Size and Business Scale in the Tobacco Trades?

The present section will highlight some problematic aspects of the names and commodity declarations provided in the Scottish customs accounts. It draws on the business records of BUCHANAN&SIMSON, a co-partnership active in Glasgow between 1759 and 1763 and mainly involved in the colonial trades, as well as re-exports of tobacco, sugar and rice to continental markets.[42] For the present purpose only cargoes declared as exports to German ports will be considered, as given in Appendix A 11. This appendix contains a list of all consignments sent to Hamburg and Bremen on BUCHANAN&SIMSON's account during their period of activity (1759-1763), as apparent from BUCHANAN&SIMSON's business records in combination with information contained in the Greenock and Port Glasgow customs accounts in the same period. Although the list might well be incomplete, and the composition of particular voyages uncertain (as the quality in particular of the invoice books and the journals deteriorates after 1761 and the firm's letter book is incomplete), it is apparent that more was indicated in the firm's records as having gone to Germany than recorded in the customs accounts of Port Glasgow and Greenock (assuming that the firm used no other Scottish outport). Also there are some marked deviations between the names of the exporting merchant(s) given in the customs accounts and the information as to the ownership of the cargo as given in BUCHANAN&SIMSON's business records. Whilst this is not surprising *a priori* (merchants cheated the Customs whenever the potential gains exceeded the risks, after all), an explanation needs to be sought nevertheless.

Several scenarios might be thought of as an explanation, but caution needs to be applied. (1) Since the reconstruction of the itineraries in part 1 of Appendix A 11

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42 The activity of BUCHANAN&SIMSON on the German market will be discussed *en detail* in chapter 8.

(firm's records) is somewhat conjectural, the difference between quantities and itineraries given in part 1 and part 2 (customs accounts) of the same table might not be crucial. (2) Obviously, the customs declarations (port books) did not indicate the names "Buchanan" and/or "Simson" as the exporters' names in all instances indicated in the run of BUCHANAN&SIMSON's set of records as exports that had taken place on the account of BUCHANAN&SIMSON themselves. Presumably, collective or lump-sum entries would be made in the customs accounts for large cargoes in which many merchants and more than one partnership had an interest (or were part-owners), without necessarily distinguishing the single components or share of single merchants. (3) Cargoes might also have been re-directed by BUCHANAN&SIMSON without indication in the customs accounts. (4) A further possibility is that the "exporters" given in the port books were either (a) the persons BUCHANAN&SIMSON had purchased their cargoes from initially (perhaps on credit?), or (b) BUCHANAN&SIMSON obtained the cargoes on consignment themselves, which would mean that technically the sellers to BUCHANAN&SIMSON remained owners of the tobacco until the final sale in Hamburg and Bremen. Suffice it to cite but two examples; the final outcome will be that our modern-day understanding of British port books might be weaker than usually appreciated.

(α) The first consignment to Germany on account of BUCHANAN&SIMSON, according to the firm's records, was *Voyage 1* in Appendix A 11 (ship: *Young / Jonge / Junge(r) Lucas*, Captain Gerrit Kooter, in March 1759, to Stephen Wolfenden (consignee). According to BUCHANAN&SIMSON's business records, the cargo consisted of: (i) 61 hhds (55,872 lbs) tobacco, bought from James Ritchie & Colin Dunlop (Glasgow), and (ii) 16 hhds tobacco, bought from Thomas Aitchison & William Miller. Neither the Greenock nor the Port Glasgow customs accounts, however, contain any indication as to this particular voyage having taken place on account of BUCHANAN&SIMSON. Instead all of the merchants indicated in BUCHANAN&SIMSON's business records as the persons from which the tobacco had been bought (Colin Dunlop, William Miller and Thomas Aitchison), appear in the Greenock and Port Glasgow customs accounts *as exporters on their own account* (or in company) via the *Young Lucas*, which cleared Greenock and Port Glasgow for

Hamburg in Ladyday Quarter 1759. A further 137 cwt[43] of Muscovado sugar, which can be found in BUCHANAN&SIMSON's records as having gone to Hamburg in the same ship, are likewise not declared in the customs accounts on BUCHANAN&SIMSON's account, but rather on account of Alexander Houston and William Hyndman in the same ship and on the same voyage. BUCHANAN&SIMSON's journals, however, indicate Alexander Houston as the person who BUCHANAN&SIMSON had initially purchased the sugar from.[44] As according to the customs accounts, this was the only export of sugar to Germany in the quarter and ship under consideration, and as furthermore, the quantities are identical, there is an apparent mismatch of names in the merchants' records compared to the customs declarations. Apparently – at least in BUCHANAN&SIMSON's case – the customs accounts seem to have deliberately recorded not the exporter's name, but the name of the person(s) from which the exporter(s) had bought the commodities (in the space in the entry normally left for the exporting merchant's name). This seems to be more than a coincidence. A further example might be cited.

(β) According to their invoice books, BUCHANAN&SIMSON consigned 60 hhds of tobacco to Hamburg in March 1759 in a different ship (ship: *Young / Junge / Jonge Hendrick*, master: Roloff). In the Glasgow customs accounts however, only 35 hhds are indicated as having been exported on account of BUCHANAN&SIMSON themselves (Appendix A 11). The composition of the remaining 25 hhds was as follows (according to BUCHANAN&SIMSON's invoice books): (i) 3 hhds bought from *Andrew Ramsay*; (ii) 2 hhds bought from *William Miller*; (iii) 20 hhds from *Baird&Walker*. All of the latter re-appear as exporters of identical quantities in the customs accounts, yet in separate customs declarations/entries, again under their own names, rather than "BUCHANAN&SIMSON".[45]

This list of examples could certainly be extended. One question, which is somewhat unpleasant, considering that we have half a century's worth of preceding research based on the Scottish customs accounts, immediately comes to mind: what exactly did the customs export declarations record? The exporting merchant? The

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43 In Customs practice the sugar hundredweight was assessed at 112 lbs.
44 NAS, CS96/504, p. 36, p. 111.
45 See Appendix A 11.

consigning merchant? Obviously, the two might not always be the same. A more general question arises in consequence: How reliable are the customs accounts really for a micro-economic analysis or a study of firm size in the eighteenth-century transatlantic trades?[46] Business records, mainly invoice and letter books, journals, and to a lesser extent, ledgers, are a much more reliable source and clearly to be preferred over customs accounts – but, apart from a few exceptions, they are virtually absent. The customs accounts will have to remain the starting point for any analysis of Scottish trade flows – whether micro- or macro-economic in terms of its scientific approach – but their limitations have to be acknowledged.

The following sections will thus provide a more theoretical overview on possible shortfalls of the customs accounts in general, based mainly on intrinsic evidence, i.e. the customs accounts themselves, as well as contemporary Customs correspondence and some speculative reasoning.

3.1.6 Cargoes Not Covered in the Customs Accounts

As every commodity imported into or exported from a British port needed to be declared and recorded, regardless whether or not it was liable to the payment of duties, any cargo that was not recorded but shipped was either shipped without consent (or knowledge) of the Customs, or re-directed. Most of the activities covered by the first component of the problem could be described as outright "smuggling". There was, however, a certain prevailing degree of *legal* variance between merchants' declarations and factually shipped amounts, which could be made good by the merchants ex post without becoming the subject of a court case for smuggling. This problem will be addressed under the section on "post-entries". As nothing is known (or can be established from the sources) on the re-direction of cargoes and

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46 J. M. Price, "Buchanan & Simson, 1759-1763: A Different Kind of Glasgow Firm Trading to the Chesapeake," *WMQ*, XL (1983), pp. 3-41 in particular, but also his other shorter studies assembled in: Id., *Tobacco in Atlantic Trade. The Chesapeake, London and Glasgow 1675-1775* (Aldershot, 1995); Id., *Overseas Trade and Traders. Essays on Some Commercial, Financial and Political Challenges Facing British Atlantic Merchants, 1660-1775* (Aldershot, 1996); Id., *The Atlantic Frontier of the Thirteen American Colonies and States. Essays in Eighteenth Century Commercial and Social History* (Aldershot, 1996).

whether or not re-directions after the initial declaration would always be recorded, this problem needs to be left out from the following discussion. It is only smuggling and the discrepancy between initially declared and later detected factual amounts, which can be sufficiently examined, in order to reach a balanced understanding of the information contained in the customs accounts.

3.1.6.1 Smuggling

The eighteenth century has had a particularly bad press for smuggling; Scots traders appear to have played a significant role in it, with a propensity to smuggle that was particularly high in the early decades.[47] Although quantifications of the real extent of the smuggling trades remain pure speculation, it is nevertheless useful to systematically list the possible scenarios out of which differences between true and declared amounts could arise[48]:

1. No declaration at all (landing / shipping the goods outside a legal port or creek without the payment of customs duties).
2. Fraudulent declaration of goods:
    a. Declaration of less / more[49] than actually imported / exported (legally shippable commodities)
    b. Statement of a false (or incorrect) material identity.
    c. Incorrect country (origin/destination) declaration because

47 W. A. Cole, "Trends in Eighteenth Century Smuggling," *EcHR*, Second Series, X (1957/58), pp. 359-410; R. C. Nash, "The English and Scottish Tobacco Trades in the Seventeenth and Eighteenth Centuries: Legal and Illegal Trade," *EcHR*, Second Series, XXXV (1982), pp. 354-372.

48 G. N. Clark, *Guide to English Commercial Statistics 1696-1782* (London, 1938), pp. 34-38.

49 With regard to *re-exports* of tobacco it has been suggested that a common source of false declarations was merchants increasing the weight of tobacco hogsheads by adding bulk, in order to obtain a higher debenture (draw-back) than they would be entitled to. With regard to domestic exports it is often assumed that merchants used over- or under-declarations as a strategic tool, in order for instance to distort available market information in their favour. Hoon, *Customs*, p. 260f.; Clark, *Guide*, p. 15f; W. Schlote, *British Overseas Trade. From 1700 to the 1930s* (Oxford, 1952), p. 7. NAS, CE7/11, p. 10, §§XLII-LI, App. Forms No. 20/1-2, 21/1-2, 22, 23, 24 (Scheme for Draw-Backs), 25, No. D/A-D.

i. the next destination (exports) or last port of calling (imports) might be (have been) merely a transit point;
ii. exports to or imports from particular destinations might be prohibited.

Points *1.* to *2. a.* have been dealt with extensively by other scholars. It should be borne in mind, however, that *smuggling* incentives need to be differentiated by particular commodities, in order to avoid generalized statements. Commodities enumerated in the Navigation Acts, the shipping of which was bound to certain requirements, such as either personal monopoly (East India Goods) or British denizenship (all other enumerated commodities), ship's registration or certain routes, were frequently taxed at prohibitive levels, if the commodities concerned were to be retained for domestic (British) consumption. This accounts for a potentially higher level of illicit traffic than should be expected for certain other commodities, such as for instance flax, hemp and madder, which were imported into the Scottish east coast ports in huge quantities free of duty.[50]

Fraudulent declarations of goods in terms of an incorrect material identity or incorrect amounts deserve a more detailed examination, in order to fully understand the port books, particularly as previous research has carefully circumnavigated this technical and slightly complicated issue.

50 Figures for tobacco imports and re-exports for instance, derived from the customs accounts, ought to be seen as tentative suggestions of long-term trends rather than factual evidence. When imports of tobacco were declared, the total amount of imported lbs was frequently estimated, based on a few sample hogsheads, which the merchants tried to manipulate in their favour, by either enlarging them or filling them up lightly (depending upon whether tobacco was imported or re-exported). In the case of imports, therefore, a prudent merchant would aspire to proceed thus: (a) to place as many light hogsheads as possible into the collector's sample for weighing, and (b) to unload as many "over-packed" hogsheads as possible (i.e. hogsheads exceeding the average weight calculated by the collector on the basis of this sample). Bribery could be used, making the *searchers* and *metters* ("measurers") choose the "right" hogsheads for weighing.

3.1.6.2 General Problems in the Declarations of Material Identity

In general, port book entries followed the commodity classification schedule employed by the two Books of Rates used by the Customs. As these were largely indifferent towards possible quality and price differentials, for instance according to different countries of origin, it is quite difficult to determine the factual material identity and composition of the declared cargoes ex post.[51] But even contemporaries had their difficulties. With regard to linen, for example, it was common practice that

> *Cambricks* are imported under the denomination of *Silesia Lawns* and as such pay only a duty of 2½ d per yard instead of 6 d per yard formerly paid when legally imported. *Silesia Lawns* which ought to pay 3½ [d] per Ell are entered as narrow Germany and pay only $1^{1}/_{3}$ [d] per Ell. Osnaburg Linen which is rated so low as to pay only a duty of $1^{12}/_{20}$ d is entered as Narrow Germany and pays only $1^{6}/_{20}$ [d]. Dutch Hollands entered as such pay a duty of nigh 8 d per Ell but are commonly entered as broad Germany and pay only 3d per Ell.[52]

As a variety of differing grades and labels of cloth had to be discerned from each other (and protective import tariffs applied to certain types of cloth), linen import figures are susceptible to a large error margin, not only with regard to the factual quantities shipped, but also their factual material identity.[53] A most extreme case was chemicals ("drugs"), with hundreds of different specimens listed in the Book of Rates.[54] A similar story unfolds with timber. Both Books of Rates allowed for a higher than average degree of differentiation, which by the same token conferred an

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51 Anyone who has come across personal or business records of overseas merchants, such as invoice books and ledgers, and who compares the information contained in the latter with the customs declarations recorded for these goods in official accounts, will immediately note the difference in extent and precision. Eighteenth-century merchants invoice and account books would of course be preferable in any case but alas! – this type of record is an extremely rare species. Cf. for instance the invoice books of Buchanan & Simson (NAS, CE96/502-3) with Glasgow customs accounts.

52 NAS, RH2/5/11/23-24, *Memorandum on the common practice used in importing foreign linen etc.*

53 In domestic linen production the stamp masters, responsible for the collection of Scottish linen produced for the market, were normally chosen from the ranks of professional weavers, as specialist knowledge was required to adequately distinguish the several available types of linen from one another. A. J. Durie, *The Scottish Linen Industry in the Eighteenth Century* (Edinburgh, 1979).

54 Langham, *Neat Duties* (London, 1712).

imputed degree of expertise upon the examining customs officials which might not necessarily correspond to their factual level of training.[55] For the prudent and experienced merchant there was accordingly ample scope for fantasy in the commodity declarations. Even as bulky and cheap a commodity as timber was subject to these practices. Timber was inhomogeneous, often imported in large numbers of comparatively small pieces, which could in almost all cases be assigned to at least two different classifications employed in the Book of Rates. This inherent ambiguity frequently *inter alia* led to a particular phenomenon called *post-entries*.

3.1.6.3 Post-Entries

If a difference between declared and factually imported *amounts* or *type of commodity* was detected by the outport's collector and his staff (land-waiters, tidesmen) ex post, i.e. upon the second check after the original import declaration had been made[56], the merchant was required to return to the customhouse in person, "post-enter" the difference and pay duty accordingly. Post-entries would in fact sometimes be made (and differential duties settled accordingly) several years after the original cargo had been landed. They are a clear indication that there was a certain degree of tolerance on the part of the Customs of what might be called a form of smuggling.[57]

Two different categories of post entries can then be distinguished. (a) The first relates to the ***amount*** of a particular cargo which, upon cross-examination of the merchant's declaration by the surveyor and land-waiters, was found to be

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55 E.g. Aberdeen, 1755: NAS, E504/1/5-6; General Entries Inwards, passim. *Norway, Swedish* and other deals under 20ft length might be mistaken for *battens; middle balks* could turn out to be *small balks*, and *small balks* might appear to be *small spars* upon second inspection of the cargoes after declaration. Timber (oak, fir, beech) could be imported and taxed in either load / feet (50 ft to the load), or in long hundreds, depending upon whether "great", middle or small balks were concerned. The final decision as to the material identity, on which customs were levied, was down to the collector. The degree of this measuring bias can be gathered from the amount of post-entries necessary in one particular port.

56 Import and export procedures are outlined in Appendix A 4.

57 As it is quite obvious that a post-entry could well be the result of a deliberate (yet detected) false declaration, either of an incorrect material identity, or, more commonly, incorrect quantity of goods shipped.

inaccurate.[58] (b) Another category of post-entries applied, when the cross-examination of the searchers revealed that the original merchant's declaration as to the ***material identity*** of the cargo was at variance with the facts detected ex post. If the amounts remained the same (e.g. one ct of *middle masts* was to pass as one ct of *small masts* etc.), the tracking of the true amounts shipped is a straightforward task. But some of the later amendments relating to the nature of the commodity did not exactly specify the resulting new amounts, as a change in the material identity could result in a different applicable measure per unit.[59] Official evidence as to how to translate the legal requirements into practice and re-compute amounts arising from those post-entries remains scarce and ambiguous.[60] Whilst most post-entries may be treated as regular import (or export) declarations, there remains ample scope for ambiguities when it comes to aggregate trade figures obtained from the customs accounts. Any database constructed on the basis of the customs accounts therefore needs to remain to a large extent the product of ad-hoc decisions by the compiler.

3.1.6.4 Port Books: The "Bottom Line"

Thus there is a certain bias inherent to any database constructed on the basis of information contained in the customs accounts. Needless to say that even the highest degree of accuracy of measurement and procedure on account of customs officials as described above could be marred by sloppiness, bribery and other forms of manipulation. The level of smuggling could only theoretically be captured ex post and in exact terms by cross-checks of (a) either account books of a particular merchant with the statements made in the bills of entry at the port (copied into the port books), or (b) by a cross-country comparison of similar sources, which has been

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58 This type of post-entry is easy to interpret and to deal with in the statistical analysis. All one has to do is to add the amounts up to the original entry (the decision becomes difficult if both fell into different years).

59 E.g. one *ct* (120) of *cut* Deals might upon cross examination become one quarter (0.1.0 ct) of *Norway deals*. Thus, if of, say, four hundred (480) "cuts of deals" imported some were detected later on to be "whole deals" but without a specification as to how many of the initial "cuts of deals" were whole deals in the corresponding post-entry, it is impossible to determine the "true" amounts of both cuts of deals and whole deals shipped in this quarter.

so far attempted only by Åström.[61] Therefore the information presented in the port books (and those statistics based on them) represent in fact the best-informed guesses on foreign trade in the eighteenth century.

The next step is an examination of statistics derived from customs accounts, mainly the inspector general's ledgers of imports and exports, which were based on sets of information similar – but not identical! – to those on which the port books were based.

60 NAS, CE7/11, Instructions 1707, p. 17, §LXVII. Crouch, *View,* Pt. II (London, 1728), p. 16.

61 If nature and extent of the available sources actually afford this opportunity. Regarding the seventeenth-century English port books, Åström came to the somewhat pessimistic conclusion "that it is always necessary to combine the Port Books with some other source" and that "they enable one to calculate the *minimum figures* for the different articles." Åström, *Customs Accounts*, p. 65f.

3.2 Inspector General's Ledgers of Imports and Exports ("TNA, Customs 14")

3.2.1 General Remarks

From 1755 onwards, detailed trade statistics have survived, which break down Scotland's gross total trade by (i) imports, exports, re-exports *in time* (re-exported within three years after import, full legal drawback) and re-exports *out of time* (no draw-back)[62], and (ii) by countries Scotland traded with. Naturally these ledgers have aroused more scholarly interest than any other source, as they conform to the range of data sought after in modern economic theory, and thus apparently allow the application of the modern concept of the trade balance to historical analysis. The subsequent analysis needs to be broken down into two components:

(a) the credibility of the ledgers in material terms:
   1) How much of factual total trade was recorded? This discussion is best to be carried out with regard to the customs accounts (port books), as these were the primary source for the ledgers. Accordingly, the problems of smuggling have been addressed in the previous sections on the port books.
   2) How much of what was recorded on the outport level (customs accounts) actually found its way into the ledgers?
   3) How reliable are the country classifications employed?

(b) The usability of the monetary figures applied in the ledgers.

Aspect (b) has attracted considerable attention in the past, chiefly by economists, and mainly with regard to the English customs ledgers.[63] It will therefore be dealt with

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62 "Out of time" generally meant that no draw-back of import duties was granted. This could be the result of the fact that (a) either the commodities under consideration were re-exported more than three years after importation; or (b) the re-exported goods under consideration had been seized (i.e. had been smuggled before). The latter could draw-back no import duties and were thus labelled "out of time" as well in the *lingua franca* of the customs and Treasury administration.

63 S. D. Smith, "Prices and the Value of English Exports in the Eighteenth Century: Evidence from the North American Colonial Trade," *EcHR*, Second Series, LXVIII, Nr. 3 (1995), pp. 575-590; J. J. McCusker, "The Current Value of English Exports, 1697 to 1800," *WMQ*, XVII, 3 (1971),

only very briefly in the present work, as there is no need to re-iterate the conclusions drawn on the monetary reliability of the English customs ledgers (which were identical to the Scottish source in terms of their design). But to discuss ceteris paribus the possibility of re-computing the aggregate figures contained in the ledgers into current values and similar manipulations to this source which are notorious[64], means to beg the central question of whether the *quantities* of commodities shipped, as indicated in these ledgers, are at all correct.

With regard to England, scholars have been fully justified begging the question, as the eighteenth-century English customs accounts, which would allow a comparison between the material quantities stated therein and the inspector general's ledgers, are largely lost. For Scotland, they are preserved in full series since Christmas quarter 1742, which allows a rare detailed insight into what these statistics actually cover. The following remarks should therefore be seen in a "British" rather than narrowly Scottish perspective, as the possible implications regarding the administrative practice and the resulting reliability of economic statistics reach far beyond Scotland.

3.2.2 History of the Office

The English and Irish offices of inspector general of imports and exports had been established in 1696.[65] Scotland, however, with a considerably lower per capita trade volume than England and minuscule net taxation yields, was of no major interest to the Treasury and thus left without such statistics for a further 60 years. The available circumstantial evidence suggests that the establishment of the Scottish office in 1755 was in fact the result of the Treasury's concern about a temporary yet considerable

pp. 607-28; P. Deane and W. A. Cole, *British Economic Growth 1688-1959. Trends and Structure* (Cambridge, 2nd ed., 1967), pp. 40-50, pp. 315-322 (App. 1). Schlote, *Trade*, pp. 3-38; Clark, *Guide*, pp. 1-42; T. S. Ashton, "Introduction" in E. B. Schumpeter, *English Overseas Trade Statistics*, 1697-1808 (Oxford, 1960), pp. 1-14; W. E. Mitchinton, "Introduction" in Id. (ed.), *The Growth of English Overseas Trade in the Seventeenth and Eighteenth Centuries* (London, 1969), pp. 1-63; esp. pp. 52-57; B. R. Mitchell, *British Historical Statistics* (Cambridge, 1988).

64 E.g. McCusker, "Current Value".

65 Proto-ledgers for England, covering 1693-1695 have been discovered recently: Smith, "Prices," at p. 575, n.1

depression in the Scottish volume of (tobacco) trade in 1754-55 after a continuous and rapid expansion between 1736 and 1753.[66] The Scottish inspector general was inaugurated by a Treasury constitution of 13 December 1754; his would be a comparatively minor office with a modest salary compared to other posts available in the Scottish Customs (and Excise) administration.[67] The first inspector, Archibald Campbell[68], held office until 1764/5, succeeded by Robert Menzies of Coulterallars, who continued to work as a clerk for his successor John Wightman from 1769 on.[69] In 1754, Campbell was advised to follow English practice and precedent:

> Ordered that the Specimens of a Ledger, and *the Account sent Quarterly from the Out Ports in England to the Inspector General of Exports and Imports there*, transmitted in Mr. Wood's Letters of the 18th of October last and the 5th instant, be Communicated to Mr. Archibald Campbell Inspector of Exports and Imports for his Information and Direction.[70]

In terms of content and design, therefore, the Scottish and English ledgers may in fact be said to be largely identical.[71]

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66 NAS, RH2/4/460, p. 278f. NAS, E501/46, 48 (1753, 1755), yields of "Customs" (Old Subsidy), money and bonds. As total yields of the Old Subsidy (1660) – a rough volumetric index of the "volume of trade" – were down by 36 per cent in 1755, compared to their peak in 1753, trade was clearly in depression.

67 NAS, CE1/8, 31 December 1754. TNA, T1/447/242-243. His salary was £100 Sterling p.a., two thirds of the salary of the Scottish Deputy Receiver General of the Customs, who was paid £150 at the same time.

68 Campbell's private records can be found in: NAS, GD240/Box2/Bdl.4.

69 TNA, T1/469/*131 Account of the Value of All Goods, Wares and Merchandize exported from Scotland to the British Colonies in North America Christmas 1768-Christmas 1769*; signed "Robert Menzies for the Inspector of Imports and Exports". Cf. signatures in RH 2/4/10-11. RH4/203/1/56, *Memorial on Robert Menzies, Inspector General of Imports and Exports.* In 1784 one Robert Menzies re-occurred as Inspector General of the Scottish Customs. NAS, CE 7/5, *Report Book of the Inspector General of the Customs Commencing 7 September 1784*, "Robert Menzies".

70 Author's italics. NAS, CE1/8, *Minutes of the Scottish Board of Customs*, 31 December 1754, see also 4 January 1755.

71 The English ledgers differentiated between imports to (and exports from) *London* on the one and the out ports on the other hand. In the early history of the British customs in Scotland, the division between Leith and the "Outports" was made at least in one official abstract relating to the Customs duties. NAS, E231/2/3.

3.2.3 Design

The inspector general's *Ledgers of Imports and Exports*[72] can be called proper trade statistics, inasmuch as they were aimed at calculating Scotland's balance of trade. They convey the following information:

(a) country of origin (imports) / destination (exports) [73];
(b) specification of commodities carried;
(c) quantities in British ships, or
(d) quantities in foreign ships;
(e) valuation" (interval);
(f) total value (quantities in (c) and (d) multiplied by the arithmetic medium of starting and ending point of the interval in (e)).

Taken at face value, therefore, TNA, Customs 14 appears to be a particularly useful aggregate of trade fluctuations by countries and commodities. In terms of the information required it is superficially obvious that the ledgers needed to be based on information contained in the customs accounts. There is, however, a remarkable incongruence between the customs accounts and the inspector general's ledgers for 1755 (the year for which both have been examined en detail) in terms of the aggregate trade figures. The most important issue to be discussed therefore is the question of how precisely the transmission of information between outports and inspector general worked in practice.

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72 TNA, Customs 14.
73 The design of the export tables was very similar, but there were three different types of export tables, one each for domestic exports, re-exports in time (i.e. normally three years) and re-exports out of time. If commodities were re-exported "in time", they were entitled to drawback of part of or all customs duties paid upon import; the goods' valuations were adjusted accordingly.

3.2.4 The Link between the Port Books and the Ledgers of Imports and Exports – A Case Study for 1755

3.2.4.1 The Problem

For this purpose a re-appraisal of the port books is necessary. Scholars using the port books have frequently been tempted to believe that the customs accounts were factual accounts of imports and exports.[74] This, however, overlooks the basic fact that port books are mere accounts of customs duties paid (credit). They did not usually contain information regarding warehoused goods, i.e. goods on which duties were still pending.[75] Unfortunately they are also largely elusive on re-directed traffic. Thus differences between them and the super-ordinate trade statistics can be expected *a priori*.

Price has suspected that "the Account(s) sent Quarterly from the Out Ports in England", referred to in the Treasury warrant of 1754 (see above) were in fact intermediate aggregates, and differed from port books in terms of design and commodities covered.[76] Price's guess has been confirmed by evidence recently (2005) traced by the present author.[77] What exactly these intermediary accounts

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74 The issue of how the port books and TNA, Customs 14 can be linked in a logical way has been briefly yet inconclusively addressed only by Price and Cochran. Price, "New Time Series"; L. E. Cochran, Scottish Trade with Ireland in the Eighteenth Century (Unpubl. PhD thesis, 2 Vols., University of Stirling, 1980), Vol. 1, p. 24f.; Durie, *Linen Industry*; S.-E. Åström, "North European Timber Exports to Great Britain, 1760-1810" in P. L. Cottrell and D. H. Aldcroft (eds.), *Shipping, Trade and Commerce. Essays in Memory of Ralph Davis* (Leicester, 1981), pp. 81-98, at p. 82f.

75 For instance when the initial entry and the decision as to these goods' final destination fell into two different quarters.

76 Apparent from NAS, CE60/1/2 (GCA, Mitchell Library), *Letter Book Collector to Board, Port Glasgow & Greenock* (1755-1758), 14 March 1757. Cf. Price, "New Time Series," p. 311. After 1755, every outport's collector had to produce such an account, in order to facilitate the inspector general's work. In these accounts, the quarter's traffic would have been listed by countries and commodities in alphabetical order. This structure was fundamentally different from the one employed in the port books. All the inspector general would have had to do, was to "merge" those files, which were sent to him from the 28 or so outports, and to value the commodity aggregates (rows) with his "prices".

77 A note circulated from the newly appointed Inspector General of Imports and Exports, Archibald Campbell, to each of the 28 Scottish outport collectors in May 1755, clarifies that the ledgers of imports and exports were in fact not based on the port books, but rather on processed information (obtained from the port books and other files which would clarify ambiguous port book entries to

looked like however, is impossible to determine. It seems likely that the statistical information contained in the intermediary accounts would already have been organized following the same scheme as the final product (TNA, Customs 14). The crucial aspect in this regard was the problem of transmission, which can be formulated thus: "which commodities that can be found in the port books in a particular year will have to be omitted from an import-export account for this year, and for which reasons?"[78]

A comprehensive examination by the present author of the full set of Scottish customs accounts, which are completely preserved for 1755, with the likewise complete trade statistics of the inspector general for the same year suggests the following. (α) There were cargoes entered into the customs accounts which were excluded *deliberately* from the inspector general's ledgers of imports and exports. (β) Likewise, some cargoes were included in the trade statistics, which for some reasons cannot be re-traced in the customs accounts. Prior to quantifying this variance, possible sources for the mismatch between the port books and TNA, Customs 14 should be named, which could lead to a certain degree of variance between factual (declared) traffic and the capture of these trade flows in the revenue accounts (port books) and subsequent trade statistics (TNA, Customs 14). Such ambiguities could arise mainly from traffic into / ex warehouse, as well as post-entered cargoes.

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the collector). "I have sent You Inclosed a Copy of the Speciemen transmittd. to me from the Office of the Inspector Generall of Exports & Imports at London, which Speciemen You are Exactly to Follow, As the Method of Making up Your Accounts of all Goods Exported and Imported. Which Accounts You are to transmitt to me Quarterly, in Order to furnish me with Materialls for makeing Up the Generall Account to be transmitted by me Yearly To the Right Honourable the Lords of the Treasury and the Honble Commissioners of Trade and Plantations. Youre Accounts are to Commence from the 5th January 1755. I am (signed Archibald Campbell)." Dundee City Archives, NAS, CE53/2/6, *Board to Collector* (Montrose), 22 May 1755.

78 Cochran for instance has pointed out – without qualifying her statement – that "[a]nother potential source of error in using aggregates from the port books is the fact that these record "entries" of cargoes which were intended to leave or enter the port – it does (*sic!*) not record what they actually did – and although sometimes it is indicated that a certain cargo did not actually leave or enter, for certain years and at certain ports this was not indicated in the port books themselves." Cochran, Scottish Trade with Ireland in the Eighteenth Century, Vol. 1, p. 25.

3.2.4.2 Cargo Into / Ex Warehouse

The late seventeenth-century English and since 1707 British Customs system provided warehouses at every outport for storing incoming cargo that was (a) unclaimed, or (b) for which a purchaser had not been found yet, or (c) for which a final decision, as to whether it was to be imported (retained for domestic consumption) or re-exported, was still pending. As customs duties on commodities imported but to be warehoused normally varied, and their payment could be often be split, both depending upon whether (and when) the cargo was to be re-exported or released for domestic consumption[79], it was common practice to record the cargo in the port books only once: i.e. at the point when a final decision had been made, and the duties were computed definitively. Naturally this could only be the delivery *ex* warehouse.[80]

It is obvious that in those cases in which delivery into and ex warehouse fell not only into different quarters, but also different years, the customs accounts "over-state" trade for the year in which the cargo was taken out of the warehouse and "understate" trade for the year in which the cargo had been discharged from the ship. The actual problem arising is that the method of how exactly the inspector general

79 I.e. only part of the duty became due immediately, and the rest after it had been decided whether the cargo would be re-exported or retained for domestic consumption.

80 Accordingly, in the majority of Scottish customs accounts evaluated by the present author, an initial entry notifying the discharge and delivery of goods *into the warehouse* is lacking; but a full entry, including the ship's, master's and merchant's names, as well as the specification of the port or country of origin, would be made upon delivery *ex warehouse* instead, within the section for standard entries of goods inwards ("General Goods Imported"). This procedure represents one serious source bias, as an *ex warehouse* entry not necessarily specified *when* the cargo(es) had actually been landed (and sometimes years would pass between delivery into and ex warehouse). As neither *Instructions 1707* nor other contemporary *Guides* to the customs specify whether or not the port books should include all files of merchants' entries inwards, evidence relating to *in* or *ex warehouse* entries and their inclusion into the inspector general's statistics needs to be gathered intrinsically. One exception was *salt*, which was in fact recorded immediately upon unloading, regardless when it was taken out of the warehouse, as part of the salt duty became due immediately. If warehoused (bonded duty), it would be recorded into the pertaining quarter's *Book of General Entries Inwards*, and a comment "to be put into joint custody" would be added. In theory, the same applied to coffee, cocoa and tea as well, which after the reform in 1724 only paid a fractional amount of duty when brought into the warehouse for the time being, the remainder becoming due if those commodities were retained for domestic sale (see chapter 2 above). Crouch, *View* (1745), p. 37f., pp. 51-53, p. 64.

dealt with such "inter-annual cargoes" remains ambiguous.[81] The following two examples are intended to serve as a case in point. They are based on two instances of comparatively seldom-observed imports, in which the point of unloading and the time of entry lay in two different years. Although representing identical administrative scenarios, one of the entries was left out from TNA, Customs 14, whilst the other was included. It is likely that, even though the scenario refers to the 1755 sets of records, similar scenarios would have obtained more or less frequently in subsequent years.

(a) *Ex warehouse entry relating to an earlier year – considered in Customs 14.* According to TNA Customs 14, the only imports from "Africa" in 1755 were 17.3.21 cwt of beeswax and 5.2.14 cwt of bar iron.[82] None of the 1755 Scottish customs accounts (which are complete) however, indicate any traffic to or from Africa in that year. Instead, the commodities under consideration (same material identity, identical amounts) can be found in an *ex warehouse* entry in the Christmas quarter book of Leith (1755), naming the ship *Delight* from "Virginia and Africa", which had called in at Leith in Ladyday 1754 and at that time discharged a total of 13.2.0 cwt of ivory ("elephants' teeth") and 71.3.7 cwt of beeswax, but no *bar iron* whatsoever.[83] The ship would in fact have discharged the cargo at the earlier date (and not in 1755), but the bill relating to this transaction or discharge was apparently not copied into the Leith customs accounts. In fact, the *ex warehouse* entry of 1755 one and a half years later is the only reference to this cargo whatsoever. The *ex warehouse* entry from 1755 on the other hand further stated that the cargoes of concern here had been admitted to entry in November 1755 on the basis of a writ of extent dated sometime in 1754. This writ of extent was part of the liquidation of the bankrupt partnership of Thomas Douglas & Co in Montrose which took place between 1754 and 1760.[84] Thomas Douglas had been part- (and at one time sole) owner of the *Delight*[85]; the

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81 I.e. if a cargo was discharged in, and brought into the warehouse in, say, 1754, but duties paid and an entry into the port books made sometime in 1755, would the inspector general consider the cargo imported in 1754 or 1755? The evidence as to this problem is ambiguous, as will be demonstrated below.

82 TNA, Customs 14, Imports 1755, "Africa".

83 NAS, E504/22/7, IV/1755, General Goods Imported, Nr. 83, and E504/22/5, I/1755, Nr. 187 (regular), 195 (post-entry).

84 Chapter 8, section 8.3 below.

85 NAS, AC9/1581, in particular AC/1581/4.

liquidation of his company in 1754 would cause the sale of this firm's fixed assets, such as his and his partners' ships, *inter alia* the *Delight*. This suggests the following. 5.2.14 cwt of bar iron and a further 17.3.21 cwt of beeswax had been part of the Delight's total cargo in 1754. They had been unloaded but not taxed (and thus not been recorded) and were brought into the warehouse some time after 26 March 1754 (but not in 1755), presumably as a claim would be made on the goods by the various creditors for outstanding debts of the company which at that time already was in the process of liquidation.[86] All cargoes carried by Douglas and Co's ships would have been brought into a warehouse immediately upon landing and remained there, until the business had been fully liquidated. As the quarterly accounts did not normally record traffic *into the warehouse*, the first instance in which the cargo under consideration would be mentioned at all would accordingly be the time when it was taken out of the warehouse, i.e. sold at auction (in the present case more than eighteen months after it had been discharged from the vessel, in 1755). In this instance the inspector general, Archibald Campbell, considered warehoused commodities imported at the time they were taken out of the warehouse (in 1755) and included them into his 1755 account. He, however, failed to do so in another instance, in which identical conditions applied (even relating to the same case, i.e. the liquidation of Thomas Douglas & Co):

(b) *Ex warehouse entry relating to an earlier year - <u>not</u> considered in Customs 14*. According to Customs 14, the only import of *ivory* in 1755 were 3 cwt "elephant's teeth" from "America". The port books, however, provide the following information:

Table 1: Ivory Imports, 1755, according to the Port Books
NAS, E504/24/3, E504/28/7

Port	Quarter	Entry	Traffic	Country	Commodity	Amount shipped
Montrose	I	post entry critical	ex warehouse	Africa	588Elephant's Teeth (cwt)	0.74
Montrose	III	post entry critical	ex warehouse	Africa	588Elephant's Teeth (cwt)	3.78
Port Glasgow	I	regular	import overseas	North America	588Elephant's Teeth (cwt)	3

86 Since early in 1754 the creditors at Montrose were eagerly awaiting the calling of Douglas and Co's ships that were still at sea, in order to seize the vessels and their cargoes for non-payment of outstanding liabilities. The company had gone bankrupt late in 1753. Chapter 8, section 8.3 below.

Clearly TNA, Customs 14 only recorded the regular entry made in Ladyday 1755 at Port Glasgow. On 4 June and 27 August 1754, however, 3.3.3 cwt and 0.2.27 cwt of "elephant's teeth" from the *Guinea Coast*, had been landed at Montrose and delivered into the King's Warehouse there. They were delivered *ex warehouse* on 10 March and 9 August 1755 respectively. They might in fact have been seized, as a writ of extent dated 1754 by the Sheriff of Forfar refers to a seizure of a similar quantity – 20 elephants' teeth weighing 423 lbs – in possession of the merchants in Montrose discussed above, whose co-partnership underwent liquidation since 1754 (Thomas Douglas, Robert Dunbar, Robert Dickie).[87] This delivery ex warehouse was accordingly recorded amongst the entries inwards into the 1755 Ladyday ("General Goods *Inwards*", 10 March 1755) and Michaelmas (9 August 1755) quarter book of Montrose.[88] In this instance, this delivery ex warehouse in 1755 *was not* considered in TNA, Customs 14.

As both scenarios observable in 1755 (a) and (b) are contrary examples relating to the same administrative act, which should have resulted in identical procedures with regard to the inspector general's ledgers, it is not possible to discern an underlying rationale. The only possible explanation, vis-à-vis a complete lack of first-hand evidence on how the Scottish inspector general's ledgers were actually compiled, is that the now lost intermediary accounts specially prepared for the inspector general by the outports' collectors varied from port to port in terms of information covered and time schedules applied. A similar problem unfolds with regard to post-entries.

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87 NAS, E371/48, Writ of Extent, 9 June 1754.

88 Again, and according to expectation regarding the accounting system adhered to in the port books, no corresponding entry for the delivery into the warehouse in 1754 can be found in the Montrose port book for Michaelmas 1754. NAS, E504/24/3, I/1755 General Goods Imported, Nr. 7; III/1755; General Goods Imported Nr. 94. Cf. TNA, Customs 14, Imports / Africa.

3.2.4.3 Post-entries

As noted above[89], a post-entry was no import declaration as such, but only represented a later amendment of a cargo (amount and/or material identity) that had already been discharged but had been declared and taxed incorrectly either in terms of amount or material identity of the commodity concerned (and was subsequently found to be stated incorrectly). In the present context the main questions are: (a) how and to what extent were changes in the material identity or quantity of cargoes declared ex post captured in the trade statistics? (b) Did the inspector general consider a post-entry (import), which was made in a year different from the year of importation, as an import he was to include in his calculations for the earlier (year of import) or the later year (year the post entry was made)?

(a) First of all, from a complete cross-examination of the Scottish customs accounts and ledgers of imports and exports carried out by the present author for 1755 (i.e. Scotland's total trade), it appears as though the inspector general included virtually all post-entered cargoes into his 1755 ledger (mainly because the bulk of those entries still made in 1755 related to initial entries made in the same year, usually even in the same quarter). (b) But post entries might – and very frequently did so in the timber importing ports – fall into a year that was different from the one in which the original entry had been made. In this way they pose the same difficulties as those *ex warehouse* entries mentioned in the previous section. Intrinsic evidence suggests that the inspector general in Edinburgh, when compiling his ledgers on the basis of accounts sent to him by the collectors, could be made aware of amendments such as were normally covered in a post-entry, for up to three quarters after the year he was producing aggregates for had ended.[90] No definite statement can be made as to whether or to what extent these post-entries were included into or excluded from the inspector general's 1755 ledger. Therefore, the absence of the "intermediary accounts", as well as any evidence whatsoever on how TNA, Customs 14 was

89 Present chapter, section 3.1.6.3.

90 The 1755 ledger was produced (signed) on 27 September 1756; the 1756 one on 20 December 1757, the 1757 one on 26 December 1758, and the one for 1758 on 25 December 1759.

compiled, rules out a definitive link between customs accounts and inspector general's ledgers.[91]

91 Luckily, imports covered by those "critical" entries (1755 imports, parts of which were declared in a subsequent year or post entries in 1755, relating to an import in 1754 or earlier) in 1755 amounted to a total value of £563.43 Sterling, or between 0.119 per cent and 0.121 per cent of officially declared imports (depending upon whether the port books total or the official total value of imports is chosen as the base value). The general procedure adopted in the present work has been to regard post entries as imports which took place in the quarter and year the entry was actually made.

3.2.4.4 Further Elusive Evidence on Principles of Aggregation

There are other principles of aggregation in the Scottish ledgers of imports and exports which not only rule out an exact match of the inspector general's ledgers with the port books (from the point of view of a modern reconstruction), but also raise general concern about the reliability of the former. They relate chiefly to the ambiguous commodity classifications used in the Book(s) of Rates which frequently permitted to enter identical cargoes under two or more different commodity headings.[92]

But – apart from unclear procedures in accounting for later amendments – or incoherence in the recording of cargoes, there were cargoes which can be found in the port books as regular entries but that were not included in the trade statistics. Their omission is frequently too obvious to be due to purely scribal and transmission errors arising from the information flow collector to inspector general.

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92 As it was possible for many goods to be taxed at and included in at least two different classifications or labels, the aggregation by the inspector general must have depended upon the account sent to him by the outport collectors. The following list of examples should clarify this: (a) Thread and worsted stockings could be declared either in number (*dozens) of pairs*, or *weight* (cwt). As TNA, Customs 14, apart from the commodity heading "worsted stockings", also features two headings for woollen manufactures, one by weight (cwt) and one by measure (yds), it is impossible to establish ex post, how many stockings were included amongst "woollendries by weight (cwt)" and how many in "woollen stockings (dz pairs)". (b) Iron manufactures were not exclusively declared by weight but sometimes also by number, without an additional comment as to their weight in *cwt.* (c) *Leather goods* exported to America were normally listed using their commodity label according to the book of rates, but not always quantities. Instead these entries were usually followed by a lump sum entry specifying how many lbs of "manufactured tanned leather" in avoirdupois weight they weighed altogether. Presumably, the inspector general would only count the last part of this entry. In some instances, however, the inspector general clearly deviated from this principle. The category "big saddles" for instance, which should have been entirely included in "leather manufactures" (lbs) can still be found as a separate item in the ledgers (TNA, Customs 14), but featuring only a handful, i.e. clearly less "big saddles" than had been exported every year from Greenock alone. (Cf. NAS, E504/15/7 passim with TNA, Customs 14). (d) When the *whalers* returned from the Greenland fisheries, they brought with them not only blubber, whale / train oil and fins (the only commodities the ledgers would list), but all sorts of other parts of the whale as well, such as bones, tails, tongues and crang. As the quantities of the last-mentioned commodities, when declared and entered into the port books, were frequently not specified in commercial (taxable) measures, they were not included in TNA, Customs 14, either. Cf. e.g. Port books Dunbar, Midsummer 1755: NAS, E504/10/3, entries for the *North Star of Dunbar, Endeavour of Dunbar.* Cf. RH2/4/10; 1755, Imports from Greenland. G. Jackson, "Government Bounties and the Establishment of the Scottish Whaling Trade, 1750-1800" in J. Butt and J. Ward (eds.), *Scottish Themes. Essays in Honour of Professor S. G. E. Lythe* (Edinburgh, 1976), pp. 46-66, at p. 49.

3.2.4.5 Commodities obviously excluded from the Inspector General's Ledgers

On the basis of a purely intrinsic cross-examination of port books and Customs 14, three groups of omitted cargoes are evident: (a) re-exports of previously seized commodities, (b) (mostly exported) goods the amounts of which were not specified in commercial measures and thus could neither be counted nor valued *ex post*, and (c) exported, or technically, if originally from Ireland, re-exported *meat*, mainly beef, which was shipped to the colonies, and which might either be genuine exports or ships' provisions[93], but which cannot be assigned ex post for certain.

(a) With regard to previously seized goods, their omission from TNA, Customs 14 (1755) is a rather striking phenomenon. Seized goods could in fact be made legally exportable[94], and thus should have been included in the ledgers of imports and exports, when (re-)exported. Whereupon it is evident *which* commodities were omitted, the *reason* why this was the case remains elusive. *Tea* provides a good case study. The only entry for re-exports of tea in the ledgers in 1755 relates to 478 lbs of *Singlo* tea, re-exported to "America".[95] Port book evidence suggests that this tea was re-exported from *Aberdeen* to *Jamaica* in July 1755.[96] The customs accounts, however, indicate a total of 7,226 lbs of tea re-exported from Scotland in 1755. 93 per cent of this tea had been previously seized (thus it was presumably obtained from the Swedish East India Company in Gothenburg[97]); only those 478 lbs mentioned above (7 per cent of the total), had been duly supplied by the English East India Company (London).[98] The same obviously applied to seizures of higher-grade

93 R. C. Nash, "Irish Atlantic Trade in the Seventeenth and Eighteenth Centuries," *WMQ*, XLII, pp. 329-356, esp. pp. 330-341.

94 By special order of the Board of Customs, after paying the higher import and seizure, as well as applicable excise duties.

95 TNA, Customs 14, Re-exports in time, 1755. The entry is exceptional, as it is listed under "re-exports in time" and thus by definition represents tea which had been legally obtained from the London EIC. But the more important item on part of the Scots was seized tea, which obviously had been smuggled in before and thus was not entitled to draw-back.

96 NAS, E504/1/5, Aberdeen, Goods Exported, Account for July only, Nr. 125.

97 Ch. 4, section 4.3.4.

98 A total of 1,122 ½ lbs (16 per cent) of tea were re-exported in Christmas quarter 1755 from Leith to Hamburg (1,083 ½ lbs of which were *Bohea* and 39 lbs were green tea). 458 lbs (6 per cent)

foreign textiles, such as (Indian) *silk* and (mixed) "*stuffs*"[99] as well as some (French) *linens*, which were likewise either prohibited to be imported (if retained for domestic consumption) or their import was discouraged by prohibitive levels of duty.[100]

Table 2: Re-exports of Exotic Textiles omitted from TNA, Customs 14

Commodity	Unit	nr	Total value (£ Sterling)
Calicoes printed	sq yd	10	1
Calicoes	piece	220	880
Stuffs: Bandannoes	piece	5	3
Stuffs: Dimities	piece	2	4
Stuffs: Nankeens	piece	40	18
Stuffs: Romals (pieces)	piece	6	7.5
Silk Handkerchiefs	dz	139	417
Total			1,330.50

(b) Many domestic exports, such as ale, were in the customs accounts indicated in unofficial measures of varying physical extent that did not conform to the commodity heading in the Book of Rates for the good under consideration. These goods could therefore not be included in the ledgers of imports and exports.

(c) There were substantial cargoes of (normally Irish) meat (re-)exported to the Caribbean and the American mainland, which were listed in the port books amongst exports, but which do not re-occur in the ledgers of imports and exports (which suggests that they might have been intended as provisions for the voyage).

Reason suggests again that it was not the inspector general who omitted such cargoes deliberately, but the collectors in the outports, who were to present their

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were shipped to (Camp)Veere in the same quarter. NAS, E504/22/6 (Leith), 1755/II, Goods Exported, No. 27; E504/22/7, 1755/IV, Goods Exported, No. 2. Cf. NAS, RH2/4/10 (1755). 678 lbs (9 per cent) were dispatched from Inverness to Holland in Christmas 1755. The bulk of the re-exported totals were 4,008 lbs of Bohea and 482 lbs of Green tea, together accounting for 62 per cent, which were shipped from Greenock to the Isle of Man in Ladyday 1755.

99 Mostly cotton and silk textiles, but also mixtures of the two (which might include linen).

100 40 pieces of "spotted blue & white stained calicoes", 66 "Indian silk handkerchiefs", two pieces of "stained calico bed covers", one piece of "stained calicoes", which had been seized in 1754 and taken into the warehouse, were in Midsummer 1755 (re-)exported from *Leith* in the *Hope*, bound for Rotterdam. NAS, E504/22/6 (Leith), 1755/II, Goods Exported, No. 9. The same applies to a cargo of paper: NAS, E504/22/7, IV/1755, Goods Exported, Nr. 33. 14 Indian Silk Handkerchiefs, six pieces *Romals* (cotton), 40 pieces *Nankeens* (cotton), two pieces *Dimities*, five pieces *Bandanas*, six pieces *Long Lawns*, two pieces *Muslins*, two Indian Silk Bed Twills, two boxes China, one bundle coffee berries, were re-exported from Aberdeen to (Camp)Veere in Christmas Quarter 1755. E504/1/6, IV/1755, Goods Exported, Nr. 194. Neither was included in TNA, Customs 14.

intermediate import-export accounts to him. The collectors were also responsible for the country classification, and in this regard, if they were ill-informed, any incorrect information they provided to the inspector general would be perpetuated, as the latter was unable to carry out an independent cross-check.

3.2.4.6 The Country Classification Applied in the Ledgers of Imports and Exports

TNA, Customs 14 is highly inconsistent in its country labelling (and so probably are the English ledgers). Sometimes outright mistakes seem to have occurred in the transmission between ports and inspector general.[101] But there were also some deliberate biases, based on conscious decisions of the economic administrators in charge of designing and compiling the statistics under consideration. These biases need to be discussed shortly in order to fully appreciate and understand the potential as well as potential shortfalls of these statistics.

(i) The super-ordinate principle of the inspector general's trade statistics was a country labelling based on political entities (such as "France", "Russia", "Sweden", "Denmark and Norway"); a commonly agreed-upon standard for the compilation of foreign trade statistics. Nevertheless, given the territorial and political fragmentations occurring in the early modern period, country classifications were sometimes bound to remain ambiguous. The somewhat odd entity of the German Empire presents a good case in point.

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101 The customs accounts for example indicate that a total of 3,084.16 cwt of rice was re-exported from Orkney to Bremen in 1755. In TNA, Customs 14 no entry of rice exports to Germany can be found, but an identical quantity occurs under re-exports to "Sweden". There are two possible explanations for this: (a) Either the shipment had been re-directed to an unknown Swedish destination; the fact that the Bremen *Schlachteangabebücher* for 1755 contain no reference to an import of rice from Scotland, lends this possibility some support. (b) The other option is that Bremen in that year was incorrectly thought to be a Swedish port, which was somewhat excusable, as the Duchy of Bremen (but not the Free Imperial City) had been Swedish territory until 1720, and the British Customs continued to assign trade with Bremen to Sweden occasionally after 1720. NAS, E504/26/3 (Orkney), II/1755, Entries Outwards Nr. 3; *Industry of Leith*, Master: Andrew Cowan; Exporters: Clerk & Co. Cf. with *Staatsarchiv Bremen, 2-Ss.2.a.4.f.1*, *Schlachteangabebücher* (Schlachte Toll Accounts). Bremen and Sweden: W. Dotzauer, *Die Deutschen Reichskreise in der Verfassung des Alten Reiches und ihr Eigenleben (1500-1806)* (Darmstadt, 1989), p. 324f, p. 331, ch. 3.10 in general.

In general, the classification "Germany", as employed in the post-1755 trade statistics, represented the German Empire. It therefore included those parts of *Prussia* that were part of the Empire but excluded Ducal Prussia (mainly Königsberg) for which a separate heading ("Prussia") was employed. But the political fragmentation of the pre-modern German Empire as such also had repercussions on British statistical recording. *Altona* for instance, presents an ambiguity. Altona, located at that time about 10 kilometres from Hamburg down the River Elbe (today it is part of Hamburg City), was located within the German Empire but at that time under Danish rule (Danish Holstein). As far as political administration on the highest level was concerned, Danish Holstein was a *Reichskreis* (imperial district), and the Danish(-Norwegian) king therefore was a German *Reichsfürst* (imperial prince) for this part of his possessions.[102] The Scottish customs collectors in their post-1742 quarterly accounts, as well as the Scottish inspector general in his post-1755 ledgers of imports and exports, however chose to include trade with Altona under "Denmark & Norway". In this they were not wrong per se, even though an earlier order by the Board of Customs in 1722 had ruled – in the same right – that Altona was to be considered a *German* port, as far as the Customs were concerned.[103] The old Hansa town of Stralsund, located within Hither (Swedish) Pomerania, represents a similar case, as it lay within the Empire but was in Swedish possession since 1648. At present it cannot be determined for certain whether trade with Stralsund was usually covered under "Sweden" or "Germany".

(ii) Furthermore it needs to be borne in mind that TNA, Customs 14 sometimes employed purely *geographical* labels that were incongruent with political boundaries.[104] Some of the exports to Riga in 1755 for instance, were included under "Russia", some under "Livonia"[105], but without an apparent system or underlying

102 Ibid.

103 NAS, CE57/2/251, *Index of Board's Orders*, p. 31.

104 The inspector general's ledgers kept *Livonia* (Reval, Narva and Riga), albeit part of the Russian Empire since 1721, as a country heading separate from "Russia" until 1760. Some trade with Riga, however, would nevertheless be included under "Russia".

105 2,435 lbs of tanned leather goods, as well as 48 gallons of Spanish Wine were shipped in the *Forth* from Leith to Riga in Midsummer 1755. The 2,435 lbs of manufactured leather goods re-occur under the heading "Russia", whereas the wine does not re-appear at all. According to the ledgers the only Scottish export to "Livonia" in this year were 50 *weys* of salt. NAS, E504/22/6 (Leith), 1755/II, Goods Exported, No. 31, 32; cf. TNA, Customs 14 (1755).

rationale. Trade with *Madeira, Gibraltar* and the *Canary Islands* was in 1755 included amongst "Portugal" and "Spain" respectively, whereas in some later years specific classifications ("Madeira", "Gibraltar", "Canary Islands") would also be employed. Trade with the Americas was not broken down into *Caribbean* and *North America* prior to 1762; thereafter, separate balances were kept for each island (Caribbean) and colony (North America).[106]

Therefore the inspector general's ledgers of imports and exports are to be viewed critically with regard to the country classifications employed. Errors and mistakes clearly occurred in the transmission of information from the outports to the inspector general; only a simultaneous and complete evaluation of the port books for each year covered by Customs 14 would yield a more detailed and correct picture. Clearly the inspector general received aggregates, which he himself was not able to either verify or falsify.

Even though the preceding observations have been based exclusively on evidence relating to 1755, the examination has shown the possible (and hypothetical) pitfalls of the aggregates contained in TNA, Customs 14, which might well have prevailed in similar ways in subsequent years.[107] The last item on the agenda remains a more detailed breakdown of the quantitative mismatch between the port books and TNA, Customs 14 for one sample year (1755), in order to illustrate the picture sketched by the preceding remarks.

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106 Nevertheless, at the end of the separate balance sheets, a single balance of trade with the Caribbean was drawn up, regardless of the fact that some of the islands concerned were not or not continuously British, but either French (Guadeloupe, Martinique) or Danish territory (St Croix, St Thomas).

107 The preceding remarks also imply that what applies to the Scottish ledgers, probably also applies to the English statistics which have been tabulated in Schumpeter, *Trade Statistics*.

3.2.4.7 The Match between the Port Books and Ledgers

3.2.4.7.1 The Problem

The following sections deal with the match between the inspector general's "ledgers of imports and exports" and the port books, addressing the main issues:

(a) How close is the match between the amounts (imports, exports, re-exports) of trade as recorded in the customs accounts on the one and the inspector general's ledgers of imports and exports on the other hand in quantitative terms?
(b) If there are differences, how can they be explained (following the theoretical options sketched out so far in sections 3.2.4.1-6)?

It may be assumed that Archibald Campbell, the first Scottish inspector general of imports and exports, in 1755, although he received detailed instructions based on English trade recording practice – which in 1755 already had a history of 60 years behind it – would have had to cope with the following potential problems:

(a) possible misinterpretations of English procedures of aggregation by himself;
(b) possible errors and misunderstandings of instructions received by the outports' collectors (such as: "should trade with Riga and Narva be covered under 'Livonia' or 'Russia'"? Both headings existed in the trade statistics for 1755 and both would be correct. A decision had to be made nonetheless);
(c) pure sloppiness on either level (inspector general, outport collectors).

3.2.4.7.2 Method and Results

3.2.4.7.2.1 Method

For reasons of manageability only the first year in the series (1755) could be examined.[108] As the series of Scottish customs accounts is complete for this year, the

108 The following sections offer possible explanations rather than firm evidence, as it is clear that a fuller understanding of how the inspector general's ledgers were compiled requires examining a

full set of Scottish port books could be examined and all cargoes entering the declared Scottish overseas trades in 1755 were considered in the sample. The physical amounts given in TNA, Customs 14 were then subtracted from those obtained from the port books, and the resulting differences were valued at 1755 standard valuations as employed in TNA, Customs 14.[109] A full list of commodities can be found in Appendix A 9.

The aggregate differences obtained were split into positive[110] and negative[111] differences. Thereafter, percentages of the total over- and under-recordings were derived for the sub-classes of commodities in order to obtain an impression as to which commodities or groups of commodities were most likely to be either over- or under-represented in TNA, Customs 14. The results of this aggregating exercise can be broken down as follows.

Table 3: Scotland's Overseas Trade in 1755 according to Differing Sources
Figures in £Sterling (volumetric set of 1755-1757 standard valuations).
Sources: Port Books, Inspector General's Ledgers of Imports and Exports, 1755 (TNA, Customs 14)

	(a) Port Books	(b) CUST14	(c) Diff (+)	(d) Diff (-)	(e) Agg. Diff.	(f) (e)/(b)
Imports	471,096.24	465,401.60	46,029.08	-40,195.80	5,694.64	1%
Exports	300,330.35	284,693.61	31,485.46	-16,212	15,636.74	5%
Re-Exports	274,616.93	250,876.02	24,983.48	-784,975	23,740.91	9%

Note: Columns (c), (d) result from sample figures different from the valued port books totals. Therefore, (e) is not a result of adding up (c) and (d).

series of overlapping years for port books and ledgers. Ideally this would be a run of five or more years, taking into account that any newly established office, such as the Scottish inspector general with his task of recording Scotland's yearly trade balance, required time to adjust its administrative procedures as close to optimum practice (as desired by the Treasury) as possible. A series of administrative records (letters, orders) detailing the day-to-day routine of the Scottish inspector general would also be necessary in order to fully understand the design of the Scottish trade statistics. As these records have not been preserved for the Scottish office, the following explanations need to remain entirely speculative.

109 Only in those instances where no 1755 value could be obtained (for cargoes indicated in the port books as traded in 1755 but left out from TNA, Customs 14), a value from the nearest adjacent year, usually 1756 or 1757 was taken instead.

110 Quantities in the Port Books exceeding those in TNA, Customs 14.

111 Quantities given in TNA, Customs 14 exceeding those in the port books.

Table 4: The Scottish Trade Volume by Countries, NAS/E504 and TNA/Customs 14 Compared
Source, method as above

	Imports			Domestic Exports			Re-Exports					
	Port Books		Customs 14	Port Books		Customs 14	Port Books		Customs 14			
		%			%			%		%		%
Africa	£186.50	0%	£175.95	0%		0%				0%		
North America	£193,092.92	41%			£78,206.04	26%			£23,608.59	9%		
Carribean	£44,087.06	9%			£38,194.34	13%			£3,679.03	1%		
America		50%	£234,887.90	50%		39%	£119,896.69	42%		10%	£16,884.43	7%
Denmark/Norway	£18,579.56	4%	£18,582.81	4%	£6,141.03	2%	£7,145.25	3%	£13,204.70	5%	£10,295.03	4%
Flanders	£20.06	0%			£579.20	0%	£354.40	0%	£1,975.56	1%	£2,600.56	1%
France	£1,243.13	0%	£1,221.49	0%	£983.50	0%	£707.50	0%	£23,841.08	9%	£21,559.90	9%
Germany	£22,272.30	5%	£22,269.69	5%	£15,955.39	5%	£8,588.17	3%	£7,220.89	3%	£5,140.84	2%
Greenland	£7,229.81	2%	£9,462.38	2%	£413.87	0%		0%				
Guernsey	£1,012.83	0%	£853.95	0%	£15.50	0%	£15.50	0%				
Holland	£69,335.19	15%	£64,227.45	14%	£94,844.34	32%	£87,474.74	31%	£166,870.80	60%	£163,495.37	65%
Ireland	£26,376.40	6%	£26,426.92	6%	£40,089.30	13%	£36,860.75	13%	£31,909.07	12%	£28,100.38	11%
Isle of Man	£11.85	0%	£0.45	0%	£372.25	0%	£334.75	0%	£2,329.49	1%		0%
Italy	£677.65	0%	£667.65	0%	£4,605.00	2%	£7,801.23	3%				
Poland (Danzig)	£10,007.70	2%	£9,369.17	2%	£3,406.93	1%	£2,817.02	1%	£225.17	0%	£224.47	0%
Portugal	£5,794.29	1%	£6,164.94	1%	£1,729.67	1%	£1,599.62	1%	£17.92	0%		
Madeira	£75.00	0%			£398.80	0%			£8.90	0%		
Total Portugal		1%		1%		1%		1%				
Prussia	£3,660.35	1%	£3,040.20	1%		0%		0%				
Russia	£37,963.74	8%	£14,079.03	3%	£291.20	0%	£147.11	0%	£389.23	0%		
Livonia			£24,194.19	5%							£65.63	0%
Total Russia		8%		8%		0%		0%				
Spain	£5,473.72	1%	£5,268.32	1%	£2,378.75	1%	£5,339.62	2%		0%	£341.29	0%
Canary Islands	£229.60	0%		0%								
Gibraltar	£22.05	0%		0%	£1,188.13	0%			£355.15	0%		0%
Total Spain		1%		1%		1%		2%				
Sweden	£23,570.62	5%	£24,509.08	5%	£8,587.10	3%	£5,611.25	2%	£163.44	0%	£2,168.12	1%
Other/Unknown	£155.97	0%			£1,950.00	1%		0%	£44 00	0%		
Totals	£471,078.30		£465,401.56	100%	£300,330.34	100%	£284,693 60	100%	£275,843 02	100%	£250,876 02	100%

The following general observations can then be made:

1) TNA, Customs 14 under-recorded trade in general or net terms, as in all three instances (imports, exports, re-exports) the *aggregate difference*[112] is a positive one;
2) Nevertheless, the figures given in Table 1 obviously point to potentially large biases in either (+/-) direction within particular commodity classes;
3) Even though the *overall direction of the bias* (+ or -) clearly is towards an under-recording of TNA, Customs 14, there are instances (in the case of particular commodity classes) in which Customs 14 actually recorded more than warranted on the basis of the port books;
4) The under-recording is apparently not a critical one in the case of imports and exports. However, with regard to *re-exports*, the ledgers appear critical.

112 Negative and positive differences have been added up for each commodity class.

5) What regards the detailed beak-down country by country (Table 4),
   I. equal relations obtain with regard to imports,
   II. the same can be said about domestic exports; deviations amount to between one and three percentage points.
   III. With regard to re-exports, where the overall difference (commodity bias: 9 per cent) is generally most significant, the maximum deviation can be observed for Holland: 60 per cent of re-exports according to port books, 65 per cent according to TNA, Customs 14).
6) It should be borne in mind that the following is to be seen as an examination of the degree of congruence between TNA, Customs 14 and the port books in 1755, but not as an evaluation of the *legal* as opposed to the *illegal trades*, which are a totally different issue. The main exception can be seen in the timber trades; here the number of post-entries, divided by the totals, can be seen as a rough approximation of the propensity to smuggle (see Appendix A 9).[113]

The following analysis will proceed establishing chiefly the bias of counting in quantitative terms. The differences between cargoes considered both in the port books as well as the ledgers will be examined and pinned down exactly by applying the 1755 valuation schedule. The discussion will focus on particularly significant commodities only, whilst the complete set of data is provided in Appendix A 9. Explanations will by necessity have to remain tentative and largely open to imagination and speculation.

113 See discussion above on post-entries.

Table 5: Difference Port Books – TNA, Customs 14 / *Imports* (£Sterling)

	(a) Port Books	(b) Ledgers	(c) Difference :	(d) Difference (sample)
Groceries&Beverages	£212,886.80	£206,694.30	£6,192.50	£6,187.48
Textile Inputs	£88,221.98	£85,835.62	£2,386.36	£2,428.47
Textile Manufactures	£44,587.18	£42,205.00	£2,382.18	£2,445.91
Timber	£43,949.71	£52,188.62	-£8,238.91	-£8,308.19
Vegetable Products	£24,330.34	£19,800.13	£4,530.21	£4,530.84
Iron/Metal Products	£21,259.83	£21,117.25	£142.58	£138.50
Mineral Products	£12,775.88	£11,688.00	£1,087.88	£1,275.52
Dyestuffs/"Drugs"	£4,529.40	£4,312.15	£217.25	£243.71
Animal Products	£4,627.56	£5,804.13	-£1,176.57	-£1,174.28
Hides, Leather Products	£6,053.24	£6,185.81	-£132.57	-£124.85
Animal & Veg. Fats	£6,454.98	£8,341.28	-£1,886.30	-£1,890.97
Ceramics, Stone, Glass	£667.54	£654.28	£13.26	£12.62
Remaining	£619.05	£548.99	£70.06	£68.48
Totals	£470,963.49	£465,375.56	£5,587.93	£5,833.24
Residual	£132.75	£26.04		
Definite Totals	£471,096.24	£465,401.60		

Table 6: Difference Port Books – TNA, Customs 14 / *Exports* (£Sterling)

	(a) Port Books	(b) Ledgers	(c) Difference a-b	(d) Difference (sample)
Groceries&Beverages	2107,68	1970,6	137,08	-129,115
Textile Inputs	3110,84	2251,47	859,37	8,593,708
Textile Manufactures	122078,1	127603,1	-5525,03	-5614,41
Timber	117,95	71,75	46,2	46,035
Vegetable Products	8300	7770,59	529,41	529,414
Iron/Metal Products	71554,13	57049,72	14504,41	14500,12
Mineral Products	6222,41	6252,4	-29,99	-803,833
Dyestuffs/"Drugs"	2099,54	1944,76	154,78	1,450,807
Animal Products	74284,64	70987,66	3296,98	3,297,069
Hides / Leather etc.	8019,86	6625,39	1394,47	1,394,449
Animal & Veg. Fats	686,66	723,92	-37,26	-37,23
Ceramics etc.	413,44	436,35	-22,91	-229,097
Remaining	1335,09	1005,88	329,21	313,625
Totals	300330,4	284693,6	15636,72	15273,46
residual	0	0		
Definite Totals	300330,4	284693,6		

Table 7: Difference Port Books – TNA, Customs 14 / Re-*exports* (£Sterling)

	(a) Port Books	(b) Ledgers	(c) Difference a-b	(d) Difference (sample)
Groceries&Beverages	£241,444.44	£228,681.02	£12,763.42	£11,915.06
Textile Inputs	£179.89	£184.20	-£4.31	-£4.31
Textile Manufactures	£20,933.21	£14,585.35	£6,347.86	£6,452.50
Timber	£1,882.72	£1,774.25	£108.47	£108.54
Vegetable Products	£4,066.42	£4,064.30	£2.12	£2.12
Iron/Metal Products	£623.57	£583.91	£39.66	£39.65
Mineral Products	£1,296.03	£311.81	£984.22	£974.72
Dyestuffs/"Drugs"	£272.19	£142.18	£130.01	£130.02
Animal Products	£4,538.55	£32.00	£4,506.55	£4,506.56
Hides, Leather Products	£79.22	£11.61	£67.61	£67.60
Animal & Veg. Fats	£25.33	£25.33	£0.00	£0.00
Ceramics, Stone, Glass	£464.05	£458.03	£6.02	£6.05
Remaining	£19.50	£22.03	-£2.53	£0.00
Totals	£275,825.12	£250,876.02	£24,949.10	£24,198.50
residual	-£1,208.19	£0.00		
Definite Totals	£274,616.93	£250,876.02		

In order to determine whether there was a pattern (of over- or under-recording), it is necessary to disaggregate the figures into positive and negative amounts, broken down by commodity groups and particular commodities.

3.2.4.7.2.2 Imports

With regard to imports, disaggregating of the differences between the port books sample and Custom 14 by thirteen commodity classes yields the following picture:

Table 8: Under-recording of TNA, Customs 14: *Imports*, 1755 (£ Sterling)

	+ % of total over-		- % of total under-		Aggregate
Groceries&Beverage	£6,530.54	14%	-£343.06	1%	£6,187.48
Textile	£2,506.30	5%	-£77.83	0%	£2,428.47
Textile	£3,021.97	7%	-£576.06	1%	£2,445.91
Timber	£7,928.22	17%	-£16,236.41	40%	-£8,308.19
Vegetable	£4,551.04	10%	-£20.19	0%	£4,530.84
Iron/Metal	£17,149.16	37%	-£17,010.66	42%	£138.50
Mineral	£3,158.58	7%	-£1,883.06	5%	£1,275.52
Dyestuffs/"Drugs	£285.73	1%	-£42.02	0%	£243.71
Animal	£315.34	1%	-£1,489.63	4%	-£1,174.28
Hides, Leather	£97.66	0%	-£222.51	1%	-£124.85
Animal & Veg.	£327.67	1%	-£2,218.64	6%	-£1,890.97
Ceramics, Stone,	£15.07	0%	-£2.45	0%	£12.62
Remaining	£141.80	0%	-£73.33	0%	£68.48
Totals	£46,029.08	100%	-£40,195.84	100%	£5,833.24

(1) Of 13 commodity classes, only a third (timber, animal products, skins & hides and fats) are over-represented in TNA, Customs 14.

(2) Clearly, the largest mismatch is to be found with regard to timber and iron. The closest match could be established for drugs and dyestuffs, ceramics and "remaining". With regard to iron, the mismatch is only artificial, as it is due to an incoherent application of the labels "bar iron" and "unwrought iron" in TNA, Customs 14. Both were referring to a largely identical item (as far as the Book of Rates was concerned), and were valued at the same rate accordingly.[114] Therefore, positive and negative differences cancel each other out in this commodity class, as port books and ledgers are relatively unambiguous with regard to the total amount of half-processed iron ("bar iron, unwrought iron") imported. The mismatch in timber appears to be largely due to a notable difference in the imports of "staves", as well as a generally doubtful classification of this item in the port books.

3.2.4.7.2.2.1 Grocery and Beverages

According to expectation, a not unimportant share of under-recording of imports in TNA, Customs 14 was due to tobacco and other tropical non-essentials. (Overall, however, these differences did not amount to more than 2 per cent of the official tobacco imports.)

Tobacco accounts for 85 per cent of the under-recording of TNA, Custom 14 within imports of the class "Grocery and Beverages". The only other item of some importance was Spanish wine (7 per cent of excess). Overall, i.e. taken in relation to the total positive and negative aggregate deviations, the impact was minimal.

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114 Iron imports were usually given in terms of weight and numbers of bars in the customs accounts. TNA, Customs 14, however, includes large amounts of "unwrought" iron (not warranted on the basis of the port books). Both referred to the same item.

Table 9: Entries of Imported Tobacco on the Basis of the Port Books

		regular	*posted*	*posted critical*	*into/ex warehouse*	*TOTAL IMP*	*Allowances for damages*	*CUST14*	*Difference (E504-Custom14))*
Tobacco: unprocessed	lb	13,475,095	2,058,060		200,928	15,734,083	27,690	15,200,698	533,385
Snuff	lb	107			218	325		291	34

The excess of the port books sample over TNA, Customs 14 with regard to *unprocessed* imported tobacco of 533,385 lbs can only partly be explained by a supposed under-recording of allowances for damages, which in 1755 amounted to a total of 27,690 lbs[115], and which might not have been supposed to be included into the ledgers of imports and exports. There still remains an excess of 304,767 lbs of recorded amounts in the port books over Customs 14, even if neither warehoused cargoes nor allowances for damages are included. Therefore, TNA, Customs 14 fell short of at least between 2 per cent and 4 per cent of the traffic in "unmanufactured" tobacco as indicated in the port books.

With regard to Muscovado *sugar*, the match between port books and ledgers is rather accurate. The port books sample exceeds the amount given in TNA, Customs 14 by 6.58 cwt (or 0.03 per cent of the figure in TNA, Customs 14). *Rum* was also reasonably accurately recorded by the inspector general, with only a modest excess of TNA, Custom 14 of 473.33 gls, amounting to 2 per cent of the figure for total rum imports given in this source.

Seen in relation to total imports, as well as to the total excess of the port books over the inspector general's ledgers, the group of commodities aggregated into "Grocery and Beverages", which represented 38 per cent (TNA, Customs 14) of Scotland's imports in 1755, only accounted for a comparatively minor share in the total mismatch (8 per cent of over-, 1 per cent of under-recording of TNA, Customs 14). In this regard, the transfer of information from the 1755 outport records into the 1755 Treasury statistics was rather accurate.

115 Aberdeen: 6,910 lbs; Ayr: 15,030 lbs; Leith: 5,750 lbs. NAS, E504.

3.2.4.7.2.2.2 Textile Inputs and Manufactures

Textile raw material inputs appear to have found their way comparatively accurately into the trade statistics (TNA, Customs 14) as well. An excess of 53.6 tons of flax imports in the port books over the ledgers (1657.91 tons) – which can neither be explained by post-entries nor traffic *ex warehouse* – amounts to 97 per cent of the valued under-recording in this group of commodities. It is uncritical overall, as this excess figure amounts to only three per cent of the declared totals (customs accounts).

Textile Manufactures. The negative difference in this subgroup is only an artificial one, as it reflects an aggregation of imported *Osnaburghs* in the port books (rolls and ells) that differed slightly differing from the one employed TNA, Customs 14 (ells), but essentially reflects an identical total physical amount of imported *Osnaburghs* as such. However, a significant share of the remaining excess of the port books over TNA, Customs 14 arose from re-imports, under-recorded Irish linen imports and imported (but prohibited) *silk handkerchiefs*, which were largely omitted from TNA, Customs 14. It is possible that either type of commodity was omitted deliberately.

In general it seems debatable whether re-imports should be recorded at all. They were normally confined to stockings and lawns that came back as return cargoes from their original destinations "for want of sale". As these items had not been sold as intended, they did neither generate an income stream, nor paid duty, and thus ought not to have been recorded as monetary items amongst either exports or imports. However, the inspector general *did* include some of them in his import account, as can be seen from the following table:

Table 10: Re-Imports of *Scotch Lawns*, 1755 (yds)

	Port Books: regular	Port Books: into warehouse	TNA, Customs 14	Difference
North America	50	140	140	50
Caribbean	329	-	-	329
Ireland	415	-	415	0
Spain	150	-	-	150
Totals	944	140	555	529

3.2.4.7.2.2.3 Timber

This commodity class accounts for 17 per cent of under- and for 40 per cent of over-recording of TNA, Customs 14, reflecting (a) a general degree of uncertainty of classification and (b) a generally higher propensity to smuggle in the timber trades than elsewhere, which is indicated by an above-average number of post-entries (an entry that frequently was the result of a detected fraud) made in the timber trades.[116] Within this commodity class, staves accounted for 79 per cent of this class's over-recording, whereas 80 per cent of the shortfall of TNA, Customs 14 can be explained by their under-recording of *mahogany* imports.

The possibility that this bias was due to ambiguous measuring conventions can be ruled out. In general, the *long hundred* was the standard *ct* for most timber items used by the Customs, according to evidence drawn from contemporary practice corroborated by the port books and the ledgers, as well as contemporary Customs guides and manuals.[117] Whenever the load-feet measure was employed instead (fir timber; timber in great balks), one load equalled 50 feet, which again can be confirmed on the basis of port books evidence, as well as contemporary customs manuals.[118]

Nevertheless, the port books appear to be short of a total of 812,891 (6,774.09 ct) *staves*, which is a considerable number of left-out items.[119] *Mahogany* imports on

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116 See present chapter, sections 3.1.6.3 and 3.2.4.3 above.

117 With the possible exception of *cut(s of) deals,* which might have been counted in the ordinary hundred @ five score. A letter attached to the Michaelmas Quarter Book in Perth 1752 specified that "[d]eals pay Duty by the Hundred consisting of 120, but when Cuts are to be numbered in order to be reduced into Deals, the constant Practice, so far as We have seen it, has been to make Use of the ordinary hundred or five score. Thus 300 half Deals make 150 Deals or 1.1.0 ct. You will meet with twenty other Instances of this in our Books. The Discharging Officers always understand their Warrants in this Sense." NAS, E504/27/2 (Perth), Michaelmas Quarter, Copy of Letter (to the Comptroller General?) attached at the end of "General Entries Inwards", dated 20 September 1752.

118 Crouch, *View* (1738), pp. 244-254.

119 The port books differentiated between barrel, kilderkin, pipe, and hogshead staves. TNA, Customs 14, however, in 1755 applied the same valuation (£1Sterling/ct) to all types, but distinguished "Staves for Pipes and Hogsheads" from "Kilderkin Staves". Neither method corresponded to Customs practice, as all separate labels referred to staves of differing length. Length of staves in inches: pipe (56), hogshead (39), barrel (30), kilderkin (26), firkin (20). Crouch, *View*, Pt. II (1728), p. 259. For the present purpose, all staves have therefore been

the other hand were grossly under-represented in the ledgers: whereas according to TNA, Customs 14, 101 ½ tons of mahogany was imported in 1755, the port books give a total of 1,172 tons (amounting to a total of £32,230 Sterling 1755 valuations).[120]

3.2.4.7.2.2.4 Iron

The mismatch in the case of *iron* on the other hand is only a notional one. The ledgers of imports and exports employed two commodity headings for half-processed iron: "bar iron" and "unwrought iron". Both labels were used interchangeably in the port books[121], particularly in post-entries, but by far the majority of iron imports were declared as "bar" instead of "unwrought" iron. In TNA, Customs 14 however, a larger quantity of "unwrought" iron is given than warranted on the basis of the port books. As both were valued at the same rate (£10/ton) and were largely identical, the resulting difference within the composition of this commodity class is thus an uncritical one, as over-recording of "unwrought" and under-recording of "bar" iron in TNA, Customs 14, cancel each other out. With regard to semi-processed iron therefore, the match between Custom 14 and the port books is again fairly close, and the inspector general's figures are therefore quite accurate.[122]

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aggregated into one class, especially as the Customs declarations were not always straightforward in terms of the particular type of staves concerned.

120 Excluding imports of mahogany recorded in *feet*. A total of 1,200 ft were imported from America (not considered).

121 Sometimes, a post-entry naming "unwrought iron" referred to a cargo, the original amount of which had been declared as "bar iron" and so on.

122 Table: discrepant iron recording, 1755:

	Port Books	Customs 14	Difference
Iron unwrought (tons)	58,89	1,759,911	-1701,02
Bar Iron (tns)	1650,12	728,125	1,642,839
Difference			-58.18

3.2.4.7.2.2.5 Animal Products

With regard to animal products it appears that the over-recording of TNA, Customs 14 was mainly due to imports of beef (72 per cent of the negative difference observed between port books sample and TNA, Customs 14) which cannot be traced back as imports in the port books. Instead, these "imports" might be partly derived from what in the port books were entered as *re-exports* of Irish beef, presumably consumed on board of ships bound on long-distance voyages, chiefly to North America and the Caribbean.[123] Even if that was the case, however, a difference remains. Whereas TNA, Customs 14 indicates imports of a total equivalent of 533 bbl of beef, the port books do not record any import of beef, but suggest an exported (incl. re-exports of Irish beef) total of 1,785 bbl of beef.

3.2.4.7.2.3 Exports

Within TNA, Customs 14, exports and re-exports for instance were not always kept separate in stringent terms, as the exportation of previously imported raw materials in processed form (such as roll tobacco) was sometimes considered to be a domestic and sometimes to be a re-export, without any clear system or structure behind this principle of aggregation. Some tobacco, as well as sugar products therefore feature amongst both domestic as well as re-exports; the analysis, however, does not suffer from aggregating and regarding them all as re-exports, as processed sugars and tobaccos were insignificant vis-à-vis the re-export trades of these products in their raw shape.

123 In the port books, these beef cargoes were always entered amongst "Goods Exported"; their previous import was not recorded.

Table 11: Under-recording of TNA, Customs 14 / Domestic Exports, 1755 (£ Sterling)

	+	% of total over-recording	-	% of total under-recording	Aggregate Difference
Groceries&Beverages	£7.09	0%	-£136.20	1%	-£129.12
Textile Inputs	£938.54	3%	-£79.17	0%	£859.37
Textile Manufactures	£7,211.88	23%	-£12,826.29	79%	-£5,614.41
Timber	£73.35	0%	-£27.32	0%	£46.04
Vegetable Products	£1,502.55	5%	-£973.14	6%	£529.41
Iron/Metal Products	£14,603.91	46%	-£103.80	1%	£14,500.12
Mineral Products	£62.13	0%	-£70.17	0%	-£8.04
Dyestuffs/"Drugs"	£145.08	0%			£145.08
Animal Products	£4,371.57	14%	-£1,074.50	7%	£3,297.07
Hides, Leather Products	£2,029.70	6%	-£635.25	4%	£1,394.45
Animal & Veg. Fats	£66.25	0%	-£103.48	1%	-£37.23
Ceramics, Stone, Glass	£141.79	0%	-£164.70	1%	-£22.91
Remaining	£331.63	1%	-£18.00	0%	£313.63
Totals	£31,485.46	100%	-£16,212.00	100%	£15,273.46

With regard to domestic exports, the bias of Custom 14 seems largely to be due to manufactured textiles, iron and animal products.

3.2.4.7.2.3.1 Textile Manufactures

Textile manufactures are massively over-represented in TNA, Customs 14, if the information is compared against the available set of port books (they account for 79 per cent of the over-recording in Customs 14 of this commodity class). In terms of Scotch plain linen exports, quantities given in TNA, Customs 14 exceed those in the port books by 121,644 yds[124], accounting for 28 per cent of the total shortfall of the port books (domestic exports). Plain linen handkerchiefs were also over-recorded by 2,765 dz (12 per cent of over-recording); for sailcloth, the difference amounts to 88,086.4 ells (32 per cent of over-recording). This confirms Durie's observation, that TNA, Customs 14, as in most other cases, largely under-recorded trade, but in 1755 over-recorded linen exports.[125]

Chequered linens and "woollendries" however, were the main items within this commodity class which were under-represented in TNA, Customs 14; both account for 61 per cent of the monetary excess of the port books within this

124 Appendix A 9. Port Books: 703,861 yds; TNA, Customs 14: 825,504.5 yds. At the 1755 valuation schedule, this difference would amount to £4,562 Sterling.

commodity class. Altogether, therefore, within textile manufactures there is a considerable shortfall of the port books evidence vis-à-vis TNA, Customs 14.

3.2.4.7.2.3.2 Other

Within semi-processed and manufactured base metals, the shortfall of TNA, Customs 14 is largely due to one of Scotland's main domestic exports: *bar lead.* The port books exceed the ledgers by a total of 823 tons and 15 cwt of bar lead, accounting for 93 per cent of TNA, Customs 14's under-recording within this commodity group. Overall, however, an aggregate difference to the value of -£108.3 Sterling is insignificant in this context.

An excess of 3781.5 bbl of exported *herrings* of the port books over Customs 14 accounts for 69 per cent of the total excess in the commodity class "Animal Products", whereas a shortfall of 410.6 bbl of salmon yields an excess figure of £1,027 of the ledgers (or 96 per cent of over-recording of TNA, Customs 14). The remaining commodity classes appear uncritical. The complete extent of the measuring bias might be gathered from Appendix A 9.

3.2.4.7.2.4 Re-Exports

Amongst re-exports, the bias is to be found mainly in the first commodity group "grocery and beverages" and textiles. The port books recorded a remarkably higher total than the ledgers.

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125 A. J. Durie, "The Markets for Scottish Linen, 1730-1775," in: *SHR*, LII, 1 (1973), pp. 30-49, at p. 32f.

Table 12: Under-recording of TNA, Customs 14 / Re-exports, 1755 (£ Sterling)

		+ % of total over-recording		- % of total under-recording		Aggregate Difference
Groceries&Beverages	£11,971.96	48%	-£56.90	-7%		£11,915.06
Textile Inputs		0%	-£4.31	-1%		-£4.31
Textile Manufactures	£7,067.12	28%	-£614.61	-78%		£6,452.50
Timber	£217.66	1%	-£109.13	-14%		£108.54
Vegetable Products	£2.12	0%		0%		£2.12
Iron/Metal Products	£39.65	0%		0%		£39.65
Mineral Products	£974.72	4%		0%		£974.72
Dyestuffs/"Drugs"	£130.04	1%	-£0.02	0%		£130.02
Animal Products	£4,506.56	18%		0%		£4,506.56
Hides, Leather Products	£67.60	0%		0%		£67.60
Animal & Veg. Fats						
Ceramics, Stone, Glass	£6.05	0%		0%		£6.05
Remaining						
Totals	£24.983.48	100%	-£784.97	-100%		£24,198.50

In this particular instance some further statements can be made which go beyond the pure fact that amounts were under- or over-recorded in TNA, Customs 14, as the numbers and amounts recorded in TNA, Customs 14 can sometimes be traced back to particular ships and cargoes indicated in the port books. This is a rather rare occasion. Again the character of the evidence does not permit a final decision as to why exactly these cargoes were left out, as all underlying port book entries appear to have been made entirely regularly.

3.2.4.7.2.4.1 Grocery & Beverages

Table 13: Under-recording of tobacco (Re-)exports

		Exports			*Re-Exports*			*Total Difference (£ Sterling)*
		PORT BOOKS	*CUST14*	*Difference*	*PORT BOOKS*	*CUST14*	*Difference*	
Tobacco: unprocessed	lb				10,694,297	10,477,024	-21,7273	-£217,273
manufactured / roll tobacco	lb				76,813	3,025	-73,788	-£73,788
Tobacco: cut	lb	4,238	4,238	0	6,390	0	-6,390	-£6,390
Snuff	lb	2,690	2,570	-120	1,787	0	-1,787	-£1,907

Clearly, entire cargoes were omitted from TNA, Customs 14, as the following extract from the port books shows (with regard to snuff tobacco):

Table 14: Exports of Snuff from Scotland

Port	Quarter	Traffic	Destination	Region	lbs	Ship's name
GREENOCK	II/Midsummer	EXPORT OVERSEAS	NORTH AMERICA	Boston	120	Batchelor
GREENOCK	III/Michaelmas	EXPORT OVERSEAS	NORTH AMERICA	Boston	1,700	Crau/?w?ford
GREENOCK	III/Michaelmas	EXPORT OVERSEAS	NORTH AMERICA	Boston	200	Crau/?w?ford
GREENOCK	IV/Christmas	EXPORT OVERSEAS	NORTH AMERICA	Boston	550	Nancy
GREENOCK	IV/Christmas	RE-EXPORT OVERSEAS	NORTH AMERICA	Boston	120	Nancy
GREENOCK	I/Ladyday	RE-EXPORT (overseas)	NORTH AMERICA	SOUTH CAROLINA	50	Catherine
LEITH	III/Michaelmas		HOLLAND		1,737	St Andrew
		RE-EXPORT (overseas)				

From the comparison of Table 13 and Table 14 it appears as though the two cargoes at the bottom of Table 14, which were declared as re-exports in the customs accounts[126], were excluded from TNA, Customs 14. The total of 2,570 lbs for *domestic exports* of snuff on the other hand, as given in TNA, Customs 14, seems to result from the omission of either the *Batchelor* or the *Nancy*, both bound for Boston, having cleared Greenock and been declared in regular manner, but in two different quarters.

"Roll tobacco" presents a similar, yet even more extreme case: some cargoes were simply omitted.

Table 15: Exports ("Re-exports") of Roll Tobacco (processed) in 1755

Port	entry	traffic	destination	Region (if applicable)	lbs	Ship's name
ABERDEEN	regular	RE-EXPORT	HOLLAND	.	933	Unity of Aberdeen
ABERDEEN	regular	RE-EXPORT	HOLLAND	.	458	Peggie of Aberdeen
ABERDEEN	regular	RE-EXPORT	DENMARK&NORW	.	1851	Thomas & Mary of Peterhead
ABERDEEN	regular	RE-EXPORT	HOLLAND	.	5600	Nancy of Aberdeen
GREENOCK	regular	RE-EXPORT	NORTH AMERICA	SOUTH CAROLINA	845	Catherine
GREENOCK	regular	RE-EXPORT	HOLLAND	.	2369	Nelly
GREENOCK	regular	RE-EXPORT	IRELAND	.	18996	Susanna
PORT GLASGOW	regular	RE-EXPORT	IRELAND	.	20747	Carlisle
PORT GLASGOW	regular	RE-EXPORT	IRELAND	.	18503	Providence
PORT GLASGOW	regular	RE-EXPORT	IRELAND	.	4995	Providence
PORT GLASGOW	regular	RE-EXPORT	CARIBBEAN	JAMAICA	656	Industry
PORT GLASGOW	regular	RE-EXPORT	NORTH AMERICA	SOUTH CAROLINA	860	Eglinton

126 As the corresponding outward entry in the respective port book would list all the duties paid for this cargo upon import, it can be fairly safely classified as a re-export.

According to the port books, a total of 76,813 lbs of roll or processed tobacco were exported from Scotland, whereas the ledgers only list 2,369 lbs to Holland and 656 lbs to "America" (cf. Table 15). Why the remaining cargoes (a considerable residual of 73,788 lbs) were omitted, cannot be established for certain. The Netherlands and Ireland were big markets and all entries were regular entries, i.e. neither posted nor relating to an earlier year, or taken into or out of the warehouse. There is no apparent reason why these cargoes should not have been included into the ledgers of imports and exports.

3.2.4.7.3 Explanations

The conclusion to the present section needs to remain largely speculative, mainly because no administrative records of the Scottish inspector general of imports and exports have survived. Such evidence would be needed, in order to determine why a considerable amount of 1755 traffic, indicated in the customs accounts as regular traffic that had taken place in 1755, was omitted from the trade statistics relating to that year, and why some traffic that could not be found in the complete set of port books would nonetheless be given in this year's trade statistics.

Generally the most obvious explanation is to be sought in the fact that the inspector general did not have the customs accounts at hand, but instead relied on aggregate accounts sent to him by the various Scottish outports' collectors. As the latter obviously had a large degree of individual freedom in aggregating their individual data, the main source of error or bias would have arisen from the work of the customs collectors. Sometimes, as has been shown above, errors or mismatches could be obvious when two country classifications were employed that related to the same political entity, such as "Russia" or "Livonia", which arguably could be – and were – both employed for trade with Riga, Narva and Reval. Similar ambiguities could be found in the German Empire and the classification "Germany" as employed in British statistics.

As discussed above, the largest share of commodities that were generally left out from TNA, Customs 14, were either re-exports of previously seized commodities, or

goods the amounts of which were not specified in commercial measures and which were thus neither countable nor valuable ex post. Whilst there is no particularly obvious reason for the first-mentioned aspect, at least there seems to be a pattern. For some reason, the outport collectors in 1755 thought it necessary to leave out from their reports to the inspector general trade in prohibited goods that had been made legal *ex post* by the payment of seizure fines and excise duty. With regard to non-commercial measures on the other hand the explanation is fairly obvious. Whatever was not declared in standardized Imperial measure at the time of importation or exportation would obviously remain unquantifiable ex post. In some instances entire cargoes were entered in non-commercial i.e. non-customable measures. The reasons for this were apparently to avoid double counting, or traffic that did not contribute to Britain's trade balance. Examples for both were:

(a) ships which had cleared out from Scottish (British) ports previously, but which had stranded subsequently, whilst still in British waters and called in at a British port before sailing on. If the goods carried had been regularly declared before, there was no need to either tax them or, if a trade balance was to be drawn up, to include them twice on this balance;

(b) ships that stranded in Scottish waters, but carried cargoes that had been declared outside Scotland (Britain) and that were destined for places outside Scotland (Britain).[127] Even if these goods touched Scotland and caused some procedures

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127 This might apply to the following outward entry, relating to the *Margaret&Marjorie*, clearing out from Aberdeen in Ladyday 1755, specifying the following cargoes, none of which is given in a customable (taxable) measure:

involving British administrators, they would have contributed nothing to Scotland's or Britain's trade balance. The same applies to

(c) ship's provisions, which were not indicated specifically, i.e. either as "ships provisions" or "victualling bill". These goods technically did not represent an export, and thus were omitted from the inspector general's ledgers of imports and exports.

The bottom line is that official trade statistics such as TNA, Customs 14, whilst logical in many ways and very similar to modern-day trade statistics, are likely to either under- or over-state trade in particular (groups of) commodities. This aspect might be of particular relevance in a British context, as the famous inspector general's ledgers for England's overseas trade, 1696-1808 have in the past been used

Commodity	Measure	Amount
spirits	anker	130.5
molasses	anker	9
white wine	anker	2.5
powdered sugar	cask/box	3/2
loaf sugar	cask	10
soap	firkin	12
Castile soap	cask	1
currants	cask	3
raisins	cask	2
strack	cask	7
succus liquoritiae	cask	5
coffee berries	cask	1
aniseed	cask	1
quills	hamper	2
tea	box	3
writing paper	bundle	2
?Cartinage/Cartridge? Paper	bundle	2
roll tobacco	mat	8
leaf tobacco	mat	78
sugar candy	box	25
iron wire	mat	18
battery	mat	4
whalebone	bundle	1
flax	mat	1
salt (foreign)	bag	45
writing paper	ream	6
sugar	loaf	12
cinnamon	bundle	1
spermaceti	box	1

quite emphatically and rather uncritically by historians and economists.[128] Obviously much further and more detailed research into the Scottish sources would be desirable; ideally a series of overlapping years of customs accounts and trade statistics. As the English port books have been largely lost for the period under consideration, the physical quantities given in the English trade statistics have to be taken at face value. The discussion of the Scottish source, however, has shown that taking this type of source at face value can be a rather stark historical manipulation. In this way the present section is mainly to be understood as a cautionary remark against interpreting these statistics as anything more than a series, which for particular years is fraught with errors and biases, and which only in the long-run presumably approximates the overall (but unknown factual) composition of the Scottish (and in the case of the English ledgers, English) trade volume in reasonable terms.

It is now time to turn to a concise discussion of the *valuations* employed in the inspector general's ledgers. As the value of cargoes exported or imported was not normally recorded into the port books, unless unrated goods were concerned[129], finding and applying an appropriate value or multiplier, which would render current values, can be said to have initially been one of the intrinsic purposes of the office of inspector general.

3.2.5 The Scottish System of Valuations: General Characteristics and Problems

As no records pertaining to the administration of the Scottish inspector general of imports and exports and the design and pricing employed in the Scottish ledgers of imports and exports could be traced so far, the understanding of this source needs to be based on (a) the much better documented English precedent, and (b) intrinsic evidence. In combination with evidence on the English sources, which are identical

128 Schumpeter, *Overseas Trade*; Smith, "Prices"; Deane & Cole, *British Economic Growth*, pp. 40-50, pp. 315-322 (App. 1). Schlote, *Trade*, pp. 3-38; Mitchell, *British Historical Statistics*.

to the later Scottish ones in terms of contents and design, the following can be established.

(a) Imports were valued *free on board* (in the exporting country);

(b) exports were likewise valued *free on board*, in this case Scotland ("estimate of the first cost or value")[130];

(c) re-exports were valued *free on board* ("estimate of the value in Scotland after the duties are drawn back") which in this instance, as the export of a previously imported product was concerned, would equal *cost, insurance, freight* upon import plus the share of customs duties which could not be drawn back upon re-export, perhaps (but not necessarily) including a profit mark-up and certainly not considering the costs of re-shipping the goods from Britain (transport and insurance).

(d) The valuations consisted of a price interval, accounting for a range of differing prices of the products covered under each heading; the valuation used, however, was the arithmetic medium of the starting and the ending point of the price interval.

(e) The majority of valuations were kept unaltered after 1755, which renders a quasi-volumetric series.[131] It was therefore not the intention to inquire current values on a yearly basis; presumably the financial resources of the office did not permit such an ambitious task. If the 1755 relative prices that were employed correspond to reality, this volumetric schedule would represent a useful tool for the analysis of real (or commodity) fluctuations, being a ready-made physical index for weighing commodities that entered the trades in differing measures, which

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129 Then a statement of the goods' current value was made by the importer upon oath, and customs duties were levied *ad valorem*.

130 Although Ashton – without qualification – maintained (with regard to the English ledgers) that "the figures of exports were supposed to represent values of the goods when delivered at the foreign ports" (thus c.i.f.). T. S. Ashton, *An Economic History of England: The Eighteenth Century* (London, 1955), p. 151.

131 "Quasi-volumetric" because some valuations were altered in subsequent years. The English customs ledgers applied current prices as official values until 1703/9, after which date the prices were never adjusted again until the middle of the nineteenth century. Mitchell, *Statistics*, p. 551f. Ashton, "Introduction," p. 4. Deane & Cole, *British Economic Growth*, p. 42f. Cf. also Clark, *Guide*, p. 10f.; A. Maizels, "Oversea Trade" in: M. G. Kendall and A. Bradford Hill (eds.), *The*

otherwise would have to be computed by an extremely tedious procedure. This particular volumetric schedule, however, also has its disadvantages. In combination, points (a) and (b) and (d) render a somewhat contradictory scenario.

(f) Invisibles[132] were neither centrally recorded at that time, nor were they included in the trade statistics. Likewise, bullion transfers and flows of precious metals, which were recorded into the English ledgers, were not recorded in the Scottish ledgers.

The aforementioned aspects pose several problems, which need not be discussed at length, as these issues have been addressed amply elsewhere with regard to the similar English post-1696 trade statistics.[133] The main aspect to keep in mind, however, is that a volumetric series (constant valuations), whilst useful as a commodity index for real fluctuations, obviously neither captures fluctuations in *current*, nor changes in *relative prices*. There is always the possibility for instance that trade statistics employing fixed valuations at some point in time either over- or understate the real value of particular imports (exports) to the economy. This is especially likely if trade was biased towards a few significant commodities the prices of which were either highly volatile (such as grain) or rapidly declining (or rising) in the longer run – such as tobacco in Scotland's case.[134]

Therefore, in the following quantitative discussion of Scotland's trade in the period the method has been to value aggregates obtained from the customs accounts

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Sources and Nature of the Statistics of the United Kingdom, Vol. 1 (London - Edinburgh, 1952), pp. 17-31, esp. p. 21.

132 Net shipping earnings, profits, interest, dividends, insurance, brokerage commissions etc. F. N. Burton, *Contemporary Trade* (Oxford, 1984), ch. 2.

133 See discussion in Appendix A 7.

134 With regard to tobacco, Cochran suggested that the constant re-export valuation of tobacco of 2.5 d/lb might have over-estimated its true value in the 1770s, but seriously understated it from the 1780s onwards. L. E. Cochran, *Scottish Trade with Ireland in the Eighteenth Century* (Edinburgh, 1985), p. 77. Tea (English ledgers): Deane & Cole, *British Economic Growth,* p. 84, Tab. 21. Whereas in the First (English) *Book of Rates* of 4 Car. II (1660) tobacco was rated at 20d per lb, the House of Commons in 1723 held that its "prime cost" (*f.o.b.*) in Virginia would be only three farthings, thus only one-half of the rate given as "prime cost" in the 1755 trade statistics. *JHC*, XX, p. 103. The 1720s however, also saw a depression in tobacco planting and trading activities. See chapter 4 below. Schlote, *Trade*, however, in his examination of the English customs ledgers found that later changes in the prices of different goods compared to their official value in 1696 tend to cancel each other out in the end, so that the "official" totals for imports and re-exports apparently come surprisingly close to the result of modern-day re-calculations on the basis of imputed current values.

for 1754 and 1755 at 1755 valuations found in Customs 14, bearing in mind all their biases and disadvantages. TNA, Customs 14 has been re-computed into a fully volumetric series by employing 1755 valuations throughout. Corrections have been made for those (rare) instances in which the inspector general re-valued some commodities after 1755. This yields the opportunity of employing a comprehensive aggregate index that monitors real fluctuations over time of the entire set of traded commodities that were measured in different units of weight and capacity. The index measure is therefore £Sterling without any further implications as to the *current* value of the trade flows examined.

3.3 Scottish Board of Customs' General Accounts (1707-1760)

For the period before 1742/43 there are neither comprehensive accounts nor statistics which would allow a reconstruction of Scotland's total volume of foreign trade. With some reservation, specification and manipulation, however, customs yields can provide some evidence on the fluctuations in the volume of trade.[135] The best aggregates of customs yields can be found in the *General Accounts* of the Scottish Board of Customs.[136] They are the only statistical source for Scotland that allows the construction of an uninterrupted time series for the period under consideration (1707-1760). The *General Accounts* provide evidence on the yields of each of the circa 57 branches of Customs revenue ("charge") applicable in Scotland between 1707 and 1760, as well as the means they were appropriated to ("discharge"), i.e. administrational costs (wages, salaries), draw-backs, bounties, allowances, debentures and incidents. The laws pertaining to the separate branches as well as changes in the rates of duty have been collected from a set of contemporary

135 D. C. Coleman, *The Economy of England 1450-1750* (Oxford, 1977), p. 134.
136 NAS, E501.

merchants' digests and "guides" to the Customs intended as manuals for customs officers.[137]

It is important to note that a relatively strong correlation between customs yields and commercial fluctuations in the commodity trades covered by taxation, which allows quite precise reconstructions of the major commodity exports and imports for England and Scotland between c.1330 and 1660, due to duties which remained simple and normally fixed for considerably long periods, broke apart with the establishment of the Restoration Customs System under Charles II.[138] For the eighteenth century the method therefore has to be different.

Yields of "Customs" / *Old Subsidy* have been derived from the *General Accounts* of the Scottish Board of Customs.[139] They exclusively relate to the import trades. Although the *Customs* (12 Car. II c. 4, 1660) in theory also covered the *Additional Duty, Petty Custom* and *One Per Cent Inwards*[140], these duties were not listed separately in the Scottish accounts. Their yields however, would have been minimal vis-à-vis the main duty applicable (Old Subsidy). *Old Subsidy* was payable on all imported commodities that were not generally exempt from the payment of customs duties, normally at a rate of five per cent of the cargo's value as of 12 Car. II c. 4 and II Geo. I c. 7.[141] As neither the rates nor modalities of levying the Old Subsidy changed in the period, yields of this duty can be used as a very crude

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137 Langham, *Neat Duties* (London, 1708, 3rd ed. 1715, 7th ed. 1754); Crouch, *View* (1725, 2nd ed. 1731, 3rd ed. 1738, 4th ed. 1754, 5th ed. 1755); Saxby, *Customs*; Baldwin, *Survey*. Vide etiam discussion in ch. 2.

138 Scholars examining Scotland's and England's medieval and early modern trade have been able to base their research on trade on customs yields. Assuming fixed rates of duty, this allowed them to construct volumetric indices of trade in particular commodities, dividing customs yields by the rates and thus arriving at commodity indices. This method becomes inapplicable for the period after 1707. In the eighteenth century the English (British) customs comprised not only up to well over 60 different duties but the pertaining parliamentary acts numbered more than 2,000. Often several different rates were applied to the same commodity, for instance depending upon whether a ship and its crew were British or not. Frequently several different percentage rates were charged under one particular duty, dependent upon the nature of goods imported.

139 NAS, E501/1-53 (1707/8-1760).

140 For a complete list of duties applicable in Scottish ports after 1707, see Appendix A 2.

141 Commonly referred to as *Book(s) of Rates*. The second Book of Rates (II Geo. I. c. 7) only contained valuations of and the rates of duty on those goods that had not been rated in 12 Car. II (1660) c. 4 and that had been previously assessed *ad valorem* (value sworn upon oath by the importer upon unloading). Most of the commodities imported into Scotland in the eighteenth century were therefore rated and taxed according to an obsolete valuation schedule. See ch. 2 above.

approximation of fluctuations in the import trades, and by ways of basic trade theory and factual post-1755 evidence, the volume of trade in general.

The logic for this runs as follows. It was a particularity of the English (and after 1707 British) political superstructure that customs and excise duties were generally fixed with regard to the rates levied and the period of duration. The overall level of taxation could only be increased by the application of two tools which had to be used simultaneously: (1) An existing duty had to be renewed ("continuation") and (2) simultaneously, a new or supplementary or "top-up" duty, relating to the same commodity, had to be established by Act of Parliament, as parliamentary practice did not normally permit to simply raise the rates of existing duties. Customs and Excise accounting practice implemented this principle by keeping separate accounts for each duty and parliamentary period. Therefore, by restricting oneself to the original, and disregarding all subsequent top-up duties, time series can be obtained from customs (and excise) accounts which are roughly volumetric in a sense, as they are deflated of purely fiscal effects resulting from an increase (or decrease) in the level of taxation.

The proposition (for subsequent discussions of Scotland's commercial fluctuations) will therefore be that the separate accounts for selected *original duties* serve as a good volumetric index for the trades covered by these duties. Apart from the Old Subsidy (providing an overview on long-term fluctuations in gross total trade), the two original Imposts on *Wine* and *Tobacco* provide a fairly reliable picture of the wine and tobacco trades, as in terms of rates and modalities these two duties remained largely unaltered and fully applicable throughout the eighteenth century.

The following restrictions need to be imposed nonetheless. (1) The *General Accounts* of the Scottish Board of Customs are based on the Exchequer year for the Customs. This accounting period was incongruent for instance with the years employed by the inspector general of imports and exports, or the Excise accounting year.[142] In the present discussion the year into which most of the months concerned

142 The Customs General Accounts (NAS, E501) were until 1752 based on the year ending 29 September, but on the 10 October thereafter, whereas the years applied in TNA, Customs 14 normally ended on 5 January.

fell has been taken as the reference point.[143] (2) The accounts can only be used with particular regard to the import trades or – much more tentatively and much less reliably – for fluctuations in the "volume of trade"/gross total trade.[144] Since the reign of Charles II, export traffic had never been as highly taxed as the import trades. And as most of those commodities previously liable to the Subsidy Outwards became exempt from taxation in 1722[145], export fluctuations are generally difficult to reconstruct from customs yields series. (3) Regarding the import trades, however, it is crucial to note that many commodities – for instance virtually all raw material inputs used in the production of linen textiles (flax, linseed, madder) that were of considerable importance (in terms of bulk carried) for the East Cost ports – were completely freed from import duties. It is therefore evident that this series can only be used for monitoring fluctuations, but not the distribution of the trade volume.[146] (4) Although the general rate of the *Old Subsidy* was 5 per cent of the value laid down in the Book of Rates, there was a tiny group of (rather irrelevant) commodities that were taxed at 6.75, 7.5 and 10 per cent respectively.[147] Therefore, direct conclusions on changes in the volume of trade on the basis of the yields of the Old Subsidy only hold if the somewhat radical assumption of an unchanging *structure* of the volume of trade c. 1707-1783 is imposed as a ceteris paribus condition. (5) Furthermore a variety of fixed and permanent deductions ("discounts") was applicable to most goods, particularly tobacco from the British plantations (25 per cent). (6) A large share of gross liabilities could be bonded, i.e. payment deferred for up to 15 or 18 months upon payment of interest, depending on the term of the principal.[148] In those cases in which the commodities were destined for re-export, the

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143 Thus, an account running from 10 October 1765 to 10 October 1766 has been assigned to 1766; the respective figures have been correlated with the 1766 import figures contained in TNA, Customs 14.

144 Imports+Exports+Re-exports.

145 See ch. 2.

146 It would be haphazard for instance to construct indices for the share of several ports in Scotland's total (import) trades on the basis of the customs yields, as the picture would be even more extremely biased towards taxed commodities, which also dominated the trades in monetary values (Glasgow⇨tobacco).

147 Earthen and China ware, glass manufactures and other goods not particularly rated were liable to a duty of 7.5 per cent of their value declared upon oath. Children's toys paid a duty of 6.66 per cent. Similar regulations applied to the additional duties and imposts. Crouch, *View* (1745), p. 7; Baldwin, *Survey*, p. 172f.

148 See also discussion on bonds in ch. 2 above.

sums were not normally paid at all, but the sums given on the bonds were set against credit on debenture (drawback) when the cargoes were delivered for re-export (mainly tobacco).[149] Thus, substantial shares of the figures in the Customs General Accounts are in fact what could be called "virtual payments". But whilst the latter represent payments never made, the figures nevertheless mirror ongoing trade fluctuations, as they relate to real cargoes. However, due to the fact that bonded customs liabilities were generally higher than those cleared in cash immediately (or within 30 days of import), and due to the application of a variety of discounts upon ready payment, the figures for bonded customs duties were much higher on the same cargo than they would have been if all duties had been paid down in cash immediately. Obviously this factors a further error into the equation when real commodity fluctuations are examined. The conclusion remains that an index of the customs yields figures between 1707 and 1755 is to be seen only as a very rough and tentative "mirror" of the fluctuations in the (import) trades.

The relevance and practicability of the methodology suggested at present can be tested. Whilst the general impression arising from a closer examination of contemporary customs legislation ("guides" to the Customs) is that a precise volumetric index of trade cannot be established on the basis of the duties levied, some basic arithmetic proves nonetheless that both the yields of "Customs" and imports and exports post-1755 were subject to a movement very close to each other (as reflected in a sufficiently high coefficient of correlation).

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149 See discussion in ch. 2, section 2.2.2-3.

Table 16: Coefficient of Correlation, Yields of "Customs" (Old Subsidy), Scotland (x) with Various Other Parameters (y)
Source: NAS, E501/1-76; TNA, Customs 3, Customs 14.

y	R
Imports (Scotland); 1755-1783	0.69
Imports (Scotland); 1755-1771	0.91
Imports (Scotland); 1773-1783	0.84
Imports (Scotland); 1776-1783	-0.34
Trade Volume (Scotland); 1755-1783	0.8
Trade Volume (England); 1708-1783	0.81
Impost on Tobacco (1708-1783)	1

A correlation coefficient of .8 for *Old Subsidy* yields and Scotland's gross total trade (1755-1783), and of .69 for *Old Subsidy* yields and imports (1755-1783), support the notion that the yields of the *Old Subsidy* can indeed be interpreted as a volumetric index for overseas trade fluctuations over the entire period, especially for the time before Scottish trade statistics become available. Although they should by no means be mistaken for an exact measure of changes in either imports or the volume of trade in general, they nevertheless closely mirror their movement in the medium to long run. This would be expectable in the case of imports, as the Old Subsidy was payable on every import, unless the good under consideration was completely freed from duty. And, since imports and exports tended to move in unison and attained similar monetary dimensions in the medium to long run, these customs yields figures do indeed also remotely reflect the general movement of exports (and thus gross total trade) over time.

There are a series of other available accounts, providing some quantitative information on commercial fluctuations, which were produced by corporations entitled to fees and duties that were not under the authority of the Customs. As these have not been used for the quantitative discussion, they will not be considered at present.[150]

150 Such as the *Leith Shore Dues Accounts*: ECA, *Leith Shore Dues Accounts* (unclassified records), 1728seq. The Shore Dues Accounts contain information as to (a) date of ship's calling, (b) master's name, (c) merchant's name, (d) port of departure, (e) particulars of the cargo in physical terms liable to Shore Dues / Merk per Ton (quantities, units of measurement), (f) shore dues paid, (g) name of the vessel, (h) place of its registration. *Leith Crown Money Books*: NAS, *Trinity House*, GD 226/7/1. Used in: C. A. Whatley, "Economic Causes and Consequences of the Union

Thus the basis for a discussion of Scotland's commercial trajectory, 1700-1760 has been laid by an in-depth description of the institutional super-structure (chapter 2) and the available source material. The analysis will commence with an examination of the Scottish trade volume "at the eve of union".

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of 1707: A Survey," *SHR*, LXVIII, 1, Nr. 185 (April 1989), pp. 150-181, p. 170, Figure I on p. 171. *Shipping Registers* / Accounts of *Beaconage & Anchorage* and May Light Dues (Leith): NAS, CS96/1788-1796. These contain details of (a) the name of the vessels, (b) master; (c) port(s) of last calling (d) merchant(s); (e) commodities carried.

4 Scottish Foreign Trade during the First Half of the Century

4.1 The Structure of the Volume of Trade (I): Commodities

4.1.1 The Composition of the Scottish Volume of Trade "At the Eve of Union"

As trade has frequently been named as one of the paramount vested interests on the minds of (some of) the Union negotiators on the Scottish side, becoming ultimately one of the strongest arguments in favour of incorporating Union in 1707, commercial fluctuations originally received a considerable amount of contemporary attention. But contrary to what one might expect on the basis of trade's role in the political discussions of the day, the statistical material that has survived on the Scottish side from this period can be labelled "poor". One would, for example, given the argumentative weight that was assigned to trade in the Union negotiations, expect the Scottish negotiators to have ordered the compilation of trade statistics similar to those that were being produced for England since 1696 in yearly series.[1] This was not the case, and accordingly there are no overseas trade statistics available that would accurately capture Scottish trade "at the eve of Union". Instead, some doubtful derivatives circulated amongst the informed Scottish political elite immediately prior to the Union. These can only be used as proxies but not as reliable factual evidence.

Contemporary evidence on *Anglo-Scottish* trade 1696-1707 on the other hand can be gathered fairly reliably from the English inspector general's *ledgers of*

1 Inspector General's Ledgers of Imports and Exports. TNA, Customs 3. Processed in: E. B. Schumpeter, *English Overseas Trade Statistics, 1697-1808* (Oxford, 1960). The available Scottish customs accounts ("port books") in the 1680s and 1690s have been examined and tabulated in: T. C. Smout, The Overseas Trade of Scotland With Particular Reference to the Baltic and Scandinavian Trades 1660-1707 (Unpubl. University of Cambridge PhD thesis, Cambridge, 1959). Id., *Scottish Trade on the Eve of Union 1660-1707* (Edinburgh - London, 1963), does not provide statistical material on the commodity trades. I am grateful to Prof Chris Smout, Anstruther, for lending me a copy of his PhD thesis and providing some additional information on his earlier work personally.

imports and exports.[2] Since at that time England was Scotland's most important trading partner, these ledgers provide information as to between about 40 to 50 per cent of Scotland's total trade during the period covered – at English prices. Whilst in terms of coverage the English customs ledgers are better than any other comparable contemporary source, they are not particularly useful for determining Scotland's balance on current account with England in 1696-1707. Not only are the prices employed of highly dubious value; but more importantly the English ledgers completely omit one major Scottish export after 1703: cattle, which in 1700 for instance accounted for up to 53 per cent of Scottish exports to England.[3]

The rest are fairly doubt worthy *Scottish* estimates of Scotland's trade balance in 1703 and 1704, which circulated amongst the informed Scottish elite during the negotiations of an anticipated Union with England. Most notable is the item "A Reasonable Computatione of the Trade of this Kingdom in Relatione to Export and Import 1704".[4] Almost nothing is known regarding the origin of this balance, the prices and valuation scheme applied, the sources this estimate drew upon, and the share of particular countries in total Scottish imports and exports. Whilst the figures purport to be quantifying Scotland's trade balance in 1704, they are identical to the estimates employed by John Spreull.[5] Spreull's figures, however, are given in rounded '000s (£Scots) and thus represent generous approximations rather than factual evidence. They were *estimates of what Scotland would have gained, if the commodities imported were produced domestically instead of being purchased abroad.* Therefore, whilst one might expect them to be remotely based on factual evidence on Scottish imports (and exports) in 1704, it is not at all clear whether Spreull or his sources would have gained a thorough insight into the 1704

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2 TNA, Customs 3/1-10. For a discussion of this source (and its post-1755 Scottish counterparts), see chapter 3, sections in 3.2.

3 Cattle exports without doubt continued after 1704. A. R. B. Haldane, *The Drove Roads of Scotland* (1997 ed., Edinburgh, 1997), p. 56. In 1704 they might have amounted to £20,000 Sterling (see following note).

4 NLS, MS 17498, f.73, somewhat uncritically reproduced by Savile in an otherwise meticulously researched monograph. R. Savile, *Bank of Scotland. A History 1695-1995* (Edinburgh, 1996), pp. 59-61; Tab. 4.1.

5 J. Spruel (Spreull), *An Accompt Current betwixt Scotland and England Ballanced* [...] (Edinburgh, 1705).

set of contemporary Scottish customs accounts.[6] Thus one should refrain from taking these figures as anything more than impressionistic statements as to the possible overall composition of the Scottish trade volume in 1704. Nevertheless, these figures match with other contemporary evidence in global terms. They therefore support the picture yielded from the statistics on Anglo-Scottish trade 1697-1707 derived from the English customs ledgers, which were based on firm evidence derived from the customs returns of the Port of London and the English outports. In combination these sources provide a fairly safe picture of the composition of Scotland's trade balance in 1707.

In and around 1707 Scotland exported mainly linen manufactures, cattle, sheep, coal, salt, lead and, in good years, considerable quantities of grain.[7] The importance of *woollen* manufactures in Scottish exports had declined steadily over the seventeenth century, due to the notoriously and consistently poor quality of Scottish woollen textiles since the dawn of the Middle Ages, and the insurmountable English competition in this market.[8] This problem prevailed in the eighteenth century. Scots linen was of only marginally better quality. This would give rise to a series of government measures such as export bounties, the creation of the Board of Trustees for the Fisheries and Manufactures (1727), and protective tariffs on foreign imports. Whilst not always specifically directed at the Scottish economy, such measures at least retained the British colonial market for products that would otherwise have become marketable only in the Scottish home market, i.e. uncompetitive on foreign markets. *Imports* into Scottish ports consisted largely of tropical foodstuffs, luxuries and higher-grade textiles made of linen, woollen or worsted cloth, silk and cotton.

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6 Ibid., *passim*, esp. pp. 1-3. According to Spreull, Scottish imports from England in 1704 amounted to circa £151,000 Sterling, which would be just under half the total Scottish imports in the same year (42 per cent). This figure, however, is remarkably at variance with evidence from the English Ledgers of Imports and Exports, which quantify exports from England to Scotland in 1704 at £87,536 Sterling, at English prices (TNA, Customs 3). As noted above, this source omits cattle imports entirely after 1704, which biases the balance in England's favour. T. C. Smout, "The Anglo-Scottish Union of 1707.I. The Economic Background," *EcHR*, Second Series, XVI (1964), pp. 455-467, at p. 463, and n. 2 ibid.

7 I. D. Whyte, *Scotland before the Industrial Revolution. An Economic and Social History c. 1050 – c. 1750* (London - New York 1995), pp. 284-288.

8 M. Rorke, "English and Scottish Overseas Trade, 1300-1600," *EcHR*, Second Series, LIX (2006), pp. 265-288.

However hostile both nations were to each other, England had remained Scotland's main supplier as well as customer of products since the early 1600s and up to 1707. In fact it retained quite a substantial share in total Scottish exports until 1760 and beyond, as will be shown below, even though these trades ceased to be officially recorded after Mayday 1707.[9] This aspect is often overlooked. It will become of paramount significance for the argument put forward in the present work.

4.1.1.1 Exports to England

Cattle, accounting for 28 to 56 per cent, and linen, accounting for 35 to 85 per cent of total exports to England, dominated Scotland's export account with England "at the eve of Union". They even continued to do so far beyond that date, i.e. well into the 1760s and beyond, as some speculative arithmetic below will demonstrate.[10] Cattle were destined mainly for London's buoyant and continuously increasing consumption of meat, as well as provisioning of the British navy.[11] Scots linen was sent to England chiefly in order to be re-exported to the Caribbean and the Americas. London in fact was a British pool for all sorts of linen that were to be re-shipped to the British dominions. Throughout the century large London-based transatlantic firms made regular bulk orders of Scots linen.[12] And at the beginning of the 1760s for instance, a large Glaswegian firm, BUCHANAN&SIMSON still obtained their German linens for re-export to the Colonies via Glasgow from London, rather than directly from Hamburg or Bremen.[13]

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9 Ch. 6 below.
10 Present chapter, section 4.3.3 below.
11 Haldane, *Drove Roads*; S. G. E. Lythe and J. Butt, *An Economic History of Scotland, 1100-1939* (Glasgow - London, 1975), p. 112.
12 J. M. Price, *Capital and Credit in British Overseas Trade: The View from the Chesapeake 1700-1776* (Cambridge, Mass. - London, 1980), p. 111f.
13 See chapter 7, section 7. 3.5 and ch. 8, section 8.2 below.

Table 1: Scottish Exports to England, 1696-1706 (£ Sterling)
TNA, Customs 3/1-10; English valuation scheme, current (changing) values.

	Cattle		Fish		Skins, Hides		Coal		Linen Yarn		Linen		Other	
	£Sterling	%	£Sterling	%	£Sterling	%	£Sterling	%	£Sterling	%	£Sterling	%	£Sterling	%
1698*	59,701	48%	298	0.24%	5,255	4%	706	1%	2,397	2%	55,245	44%	1,231	1%
1698**			25	0.24%	1,825	17%	166	2%	385	4%	7,887	75%	287	3%
1699	33,998	39%	361	0.42%	3,282	4%	683	1%	2,736	3%	42,657	49%	2,592	3%
1700	68,707	53%	659	0.51%	3,029	2%	808	1%	7,129	5%	45,436	35%	4,318	3%
1701	24,218	33%	383	0.52%	2,800	4%	656	1%	2,224	3%	41,257	56%	2,449	3%
1702	19,800	28%	173	0.24%	2,559	4%	930	1%	3,226	5%	42,702	60%	2,040	3%
1703	25,842	34%	207	0.27%	2,163	3%	715	1%	3,686	5%	40,898	53%	2,937	4%
1704			252	0.46%	2,186	4%	529	1%	4,647	9%	44,066	81%	2,700	5%
1706			2,035	4%	303	1%	2,428	5%	42,607	85%	2,936	6%		
1707			832	12%	185	3%	390	6%	4.751	71%	575	9%		

* Michaelmas 1697-Michaelmas 1698
** Michaelmas 1698-Christmas 1698

Primary products, including those of the extractive industries (coal, lead) thus accounted for up to 56 per cent and on average for 36 per cent, of Scottish exports to England "at the eve of Union". Linen yarn played a comparatively minor role, as did coal, hides and skins which had been more important earlier. Lead and fish exports were rather irrelevant, but would later on in the century be exported in notable quantities to the Netherlands (bar lead) and Germany (fish). On these terms the Scottish export account with England captured the pillars of Scottish domestic economic activity at that time rather accurately. It reflected Ricardian comparative advantage, due chiefly to wage rate differentials in linen and yarn production, as well as "Heckscher-Ohlinian" specific factor endowment in terms of ample pastures and Highlands unsuitable for almost any economic activity other than cattle (and sheep) rearing.

Cattle. Historians of the European cattle trades often overlook that Scotland, even though she had only one single foreign market for her cattle (England), and her product never reached continental shores, nevertheless ranged amongst the largest cattle exporters in Europe at the time. In 1698, Scotland exported cattle to England to the value of c. £60,000 Sterling (Table 1). At a valuation of £1 10s Sterling per caput, this yields a number of 40,000 beasts transported to England that year. Towards the Union, this figure ought to be revised downwards to perhaps 25,000-30,000 beasts. This is not a bad record if compared horizontally (other contemporary European cattle exporters) or vertically (Scotland over time). Over the seventeenth

century Scottish cattle exports down south had increased remarkably.[14] If figures of up to 40,000 cattle are representative for good years in later seventeenth-century Scotland, this figure also compared favourably with the export record of *Denmark*, which at its heyday between 1610 and 1620 had recorded exports of up to 45,000 beasts per annum.[15] These Danish levels, however, declined to about 20,000 towards the end of the seventeenth century.[16] Scotland also compared favourably on a per capita basis with the other major contemporaneous exporter: *Hungary*. Hungarian cattle exports in the order of 100,000 heads at that time came from a population at least three times the size of Scotland's. In the eighteenth century, average Hungarian exports declined to about 40,000 heads, thus to about one-third of the Scottish per capita figure.[17] Scotland therefore ought to be seen as one of the major European cattle exporters of her time (whose product however, went to one particular market exclusively).

Research into the Scottish pastoral economy and the cattle trades has as yet been unsuccessful to establish whether the majority of cattle exports originated in the Highlands or the Eastern Lowland plains (Aberdeenshire, Grampian). This would yield important conclusions as to economic dynamics and structural change of the eighteenth-century Scottish economy.[18] But as "[a] well-known phenomenon, in a time of high cereal prices, is the ploughing-up of grassland and the transition from animal to arable husbandry"[19], one would expect that, in accordance with the steep

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14 A. J. Koufopoulos, The Cattle Trades of Scotland, 1603-1745 (Unpubl. University of Edinburgh PhD thesis, Edinburgh, 2005).

15 Excluding exports from Schleswig in the order of 5,000-7,000. R. Walter, *Geschichte der Weltwirtschaft. Eine Einführung* (Cologne - Weimar - Vienna, 2006), p. 69.

16 K. Glamann, "European Trade, 1500-1750" in C. M. Cipolla (ed.), *The Fontana Economic History of Europe*, Vol. 2. *The Sixteenth and Seventeenth Centuries* (Glasgow, 1974), pp. 427-526, at p. 472.

17 H. Schultz, *Handwerker, Kaufleute und Bankiers. Wirtschaftsgeschichte Europas 1500-1800* (Frankfurt-am-Main, 1997), p. 50f. L. Makkai, "Der Ungarische Viehhandel 1550-1650" in I. Bog (ed.), *Der Außenhandel Ostmitteleuropas 1450-1650* (Cologne - Vienna, 1971), pp. 483-206. Scottish population figures taken from C. H. Lee, "Economic Progress: Wealth and Poverty" in T. M. Devine, C. H. Lee and G. C. Peden (eds.), *The Transformation of Scotland. The Economy since 1700* (Edinburgh, 2005), pp. 128-156.

18 Adam Smith was positive about an equal share of the Highlands and Lowlands *alike* in the secular expansion of the Scottish cattle trades towards the end of the century. A. Smith, *Wealth of Nations*, quoted in R. H. Campbell and J. B. A. Dow (eds.), *Source Book of Scottish Economic and Social History* (Oxford, 1968), p. 19f.

19 B. H. Slicher Van Bath, *The Agrarian History of Western Europe, A.D. 500-1850* (London, 1963), p. 231.

increase in cereal prices in Scotland after 1740, falling real incomes, as well as an inverse price elasticity of demand (Giffen substitution effect), those areas suited to arable farming in the east of Scotland would have increasingly resorted to arable agriculture, in order to feed a growing and less-well off Scottish population. The main increase of cattle production would have to be looked for in the Scottish Highlands, which were comparatively unsuited for arable farming. As the product transported and fed itself along the way, transportation costs were, compared to other tradable commodities, modest and would be mainly contingent upon drover's wages and therefore the time spent on one drove. At the time of Union, fattening of Scots cattle in Scotland had not taken wide-spread roots yet. Therefore Scots cattle were a low value-added product, fetching sales prices of not more than £1 10 s Sterling per head on average. Compared to later periods in the eighteenth century, when prices far in excess of £7 Sterling were fetched, or Irish cattle, which were generally held to be superior, profits per unit were modest.[20]

The fact that the third English ledger of exports and imports only covers the three winter months (Christmas Quarter) of 1698[21], even allows a rare immediate glimpse on the seasonal rhythms of the trade pattern. In the winter months, linen (75 per cent) and hides/skins (17 per cent) dominated Scottish exports to England with no cattle recorded whatsoever. Defoe in 1720 believed that the state of the roads would not have permitted cattle trading over large distances during the winter months, a fact accounting for a certain degree of intra-annual variance of cattle and meat prices.[22]

Over the eighteenth century cattle exports to England expanded considerably, stimulated especially by a trend increase in cattle and meat prices after 1740.[23] The cattle trades therefore retained an economic significance for Scotland which is often under-appreciated, due to their failing to be recorded in official statistics. The other

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20 Koufopoulos, Cattle Trades.
21 Due to a change in the English accounting year. Prior to 1699 the customs ledgers covered the year from Michaelmas to Michaelmas. As of 1699 the English customs ledgers were based on the accounting period starting 5 January (Ladyday). Thus the second ledger for 1698 only covers English foreign trade between October and December 1698 (Michaelmas-Christmas 1698). TNA, Customs 3/3seq.
22 T. S. Ashton, *An Economic History of England: The Eighteenth Century* (London, 1955), p. 67.
23 Koufopoulos, Cattle Trades.

mainstay of the Scottish economy in and around 1700, as reflected in contemporary export statistics, was the production of comparatively basic linen cloth.

Linen exports from Scotland to England in circa 1700 amounted to £43,000 Sterling.[24] In 1760 the same figure was said to have risen to £300,000 Sterling, representing a seven-fold increase over six decades.[25] Whilst not much is known on either the organization of production or wage rates common in the Scottish linen industry at that time, it is generally acknowledged that wages were lower in Scotland than in England across most sectors of the economy, resulting from a lower stage of economic development.[26] Such was the capital-intensity of the production process. The industry was dispersed across the country. Production was decentralized, spread across Scotland, but had a clear focus in the east and the production of coarse, cheap items until well into the 1750s.[27] This would have made for a competitive edge of Scotland's leading industrial sector at the time, regardless the average quality of the product. Attractive pricing of poor-quality products, in combination with a protective tariff system, secured additional demand from overseas markets (mainly the English colonies).[28]

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24 £42,836 Sterling is the average figure for 1699-1704, excluding linen yarn.

25 Present chapter, section 4.3.3.

26 Lee, "Progress," p. 148. C. A. Whatley, *Scottish Society. Beyond Jacobitism, Towards Industrialization* (Manchester - New York, 2000), p. 23f., 40f., 56f. A. J. Durie, *The Scottish Linen Industry in the Eighteenth Century* (Edinburgh, 1979), ch. 2. On the European linen industry in the early modern period in general see J. Goodman and K. Honeyman, *Gainful Pursuits. The Making of Industrial Europe 1600-1914* (London, 1988), pp. 131-134; S. Ogilvie and M. Cerman (eds.), *European Proto-industrialization* (Cambridge, 1996); therein particularly: P. Hudson, "Proto-industrialization in England" (pp. 49-66); S. Ogilvie and M. Cerman, "The Theories of Proto-industrialization" (pp. 1-11).

27 R. H. Campbell, *Scotland since 1707. The Rise of an Industrial Society* (Oxford, 1971), pp. 58-63.

28 Middle Ages: H. Samsonowicz, "Engländer und Schotten in Danzig im Spätmittelalter. Zwei Formen der Handelstätigkeit" in K. Friedland and F. Irsigler (eds.), *Seehandel und Wirtschaftswege Nordeuropas im 17. und 18. Jahrhundert* (Ostfildern, 1981), pp. 48-58, esp. pp. 51-54; and more recently Rorke, "English and Scottish Overseas Trade". There can be no doubt that the exponential increase in marketed Scottish linen output over the period was largely due to foreign demand within a framework of protective taxation. This is reflected in the export share of the industry which grew simultaneously to the absolute output figures. Durie has asserted that in the early decades, the Scots' advantages lay in coarse and unfinished products. These were, however, frequently affected by poor quality and attempts at fraudulent increase of the product's volume by "stretching" it, especially during times of depression. In the finer end of the trades, especially finished (dyed) items, the Scots faced harsh competition from Dutch, German and Irish producers until later in the century. Durie, *Linen Industry*, ch. 2, esp. p. 12f., p. 19. Whatley, *Society*, p. 24. Yearly linen output figures after 1727 are given in R. H. Campbell (ed.), *States of the Annual Progress of the Linen Manufacture 1727-1754. From the Records of the Board of Trustees for Manufactures etc., in Scotland preserved in the Scottish Record Office* (Edinburgh,

4.1.1.2 Imports from England and Elsewhere

From England, Scotland obtained mainly higher-grade manufactures, such as fine linens, woollens, silk and cotton textiles, as well as exotic primary products which Scots merchants were notionally prohibited to import directly (tobacco, sugar etc.).[29] Total imports of the latter class of goods would in reality have been much higher than borne out by the statistics, as the Scots sustained a considerable yet illicit direct trade with the English dominions since the early 1660s.[30]

Table 2: Scottish Imports from England, 1696-1706 (£ Sterling)
TNA, Customs 3/1-10; English valuation scheme, current (changing) values

	Silk		Woollen Cloth		Sugar		Tobacco		Other		Totals
	£Sterling	%	£Sterling	%	£Sterling	%	£Sterling	%	£Sterling	%	£Sterling
1698*	7,334	13%	6,170	11%	828	1%	15,366	26%	28,345	49%	58,044
1698**	1,606	9%	1,723	9%	2,291	13%	8,647	48%	3,888	21%	18,155
1699	17,209	26%	10,721	16%	2,310	3%	17,282	26%	18,781	28%	66,304
1700	7,137	8%	4,228	5%	5,744	7%	37,224	44%	30,861	36%	85,194
1701	3,551	6%	1,633	3%	9,852	17%	17,710	31%	24,056	42%	56,802
1702	6,990	12%	1,156	2%	5,240	9%	20,102	34%	25,200	43%	58,688
1703	10,721	19%	1,636	3%	7,892	14%	11,829	21%	25,260	44%	57,339
1704	9,885	11%	2,119	2%	11,731	13%	42,961	49%	20,840	24%	87,536
											50,036
1706	4,086	7%	4,676	8%	6,895	11%	21,597	36%	23,058	38%	60,313
1707	646	1%	454	1%	1,769	4%	39,903	84%	5,007	10%	47,779

The item "other" consisted of an utmost variety of goods, chiefly manufactures of an inhomogeneous nature, which were traded in small amounts of value each. Smout has, with regard to this, remarked rather pointedly that:

> [i]mports from England were as miscellaneous as those from Holland. The amazing diversity of goods may be illustrated by the cargo of Hector Allan's boat, which arrived at Leith on November 17th, 1681 – pewter, hardware, hunting horns, bellows, rubbing

1964). Sir John Clerk, *Observations on the Present Circumstances of Scotland* (1730), printed in Campbell & Dow (eds.), *Source Book*, p. 108.

29 Scottish Mercantile Law prior to 1707 allowed Scots traders direct access to the products of the English colonies overseas. Under English Mercantile law, Scots could import enumerated commodities from the English colonies directly into an *English* port, if they were resident in England. J. M. Price, "Glasgow, the Tobacco Trade, and the Scottish Customs, 1707-1730," *SHR*, LXIII (1984), pp. 1-36.

30 Whyte, *Scotland*, p. 282.

brushes, floor rubbers, weavers brushes, hearth brushes, canes with ivory heads, hat brushes, hair seizers, brass compasses, spectacles, spectacle-cases, bodkins, puppets for children, rattles for children, dry and wet confections, confects, snuffers, brass chasing dishes, tobacco boxes, ivory combs, lantern horns, powder horns cradles, chairs, flutes, dates, figs, blue starch, prunes, ink horns, sandhour glasses, horse combs, barrel irons, carving knives, rapeseed, wool cards, liquorice, locks, peas, quinces, cotton wool, iron tacks, cheese, soap, wrought iron, wrought brass, senna, cicoris, (many other drugs), hops, hair bissons, brazils, virginals, alchemy spoons, brass wire pines, beaver hats, shovels, unmade tyne, strawood, combs, jumps, sweet oil, anchors, looking glasses, candle-sticks, woad, fustic, shoe-make, brass finger rings, needles, links, lead-shot, calf skins, chain butts, saddlers nails, pressing papers, hawk hoods, canes with steel heads, violins, muffs, turkey leather, girth buckles, hair." It is an illuminating example of Scotland's economic backwardness.[31]

Even though this invoice relates to 1680, it accurately reflects average conditions in 1707 and in fact in 1755 still. Throughout the period luxury goods had to be imported from abroad. The production of such goods was as yet not established in Scotland, as the domestic demand for these items was not yet large enough to warrant the risk and capital expenditure of setting up such manufactories.

This aspect was also reflected in the (estimated) composition of the volume of *total Scottish imports* in 1704:

31 Smout, Overseas Trade of Scotland, p. 54f.

Table 3: Scotland's Estimated Volume of Imports, 1704
NLS, Fletcher of Saltoun MSS, MS 17498, f.77

Commodity Class	Commodity	£ Sterling (est.)	%
1. Grocery, Beverages, Exotic Foodstuffs	Tobacco	25,000	7%
	Sugar	10,000	3%
	Wines	16,667	5%
	Brandy, Spirits	10,000	3%
	Spices	6,000	2%
	Other	5,333	1%
	Total 1	73,000	21%
2. Textile Inputs	Flax / Hemp	18,333	5%
	Silk / Hair	10,000	3%
	Total 2	28,333	8%
3.Textile Manufactures	Linen, Cottons	50,000	14%
	Wool / Silk man.	10,000	3%
	Stuffs	10,000	3%
	Total 3	70,000	20%
4. Vegetable Products	Linseed	6,000	2%
	Other	7,333	2%
	Total 4	13,333	4%
5. Metals	Iron/Copper/Steel	23,667	7%
	Other Iron Man.	7,000	2%
	Total 5	30,667	9%
6. Minerals	salt	5,000	1%
	Pitch / Tar	10,000	3%
	Total 6	15,000	4%
7. "Drugs"	Drugs	11,833	3%
8. Animal Products	Horses	2,000	1%
	Leather Man.	50,000	14%
	Total 8	52,000	15%
9.Other Manufactures	Various	61,834	17%
10. Sum Total		356,000	100%

The most powerful stimulus relating to this import bill, however, came from the Union of the Kingdoms (1707). By granting Scottish merchants legal access to the English colonial empire at equal tariff rates, one considerable constraint to Scottish economic growth since "King William's Lean Years" was removed. An almost constantly adverse balance of trade since about 1703, which contemporaries had widely lamented upon and which had led to drainage of liquid funds out of Scotland, could be reversed and turned into a stimulus for growth in the longer run. After the mid-1730s at latest, there is no doubt that a flourishing re-export business of colonial goods would have yielded Scotland a positive trade balance during most years. But prior to discussing fluctuations in the volume of trade, a brief look should be taken at the possible distribution of the volume of trade across Scotland after 1707.

4.2 *The Structure of the Volume of Trade (II): Distribution by Ports*

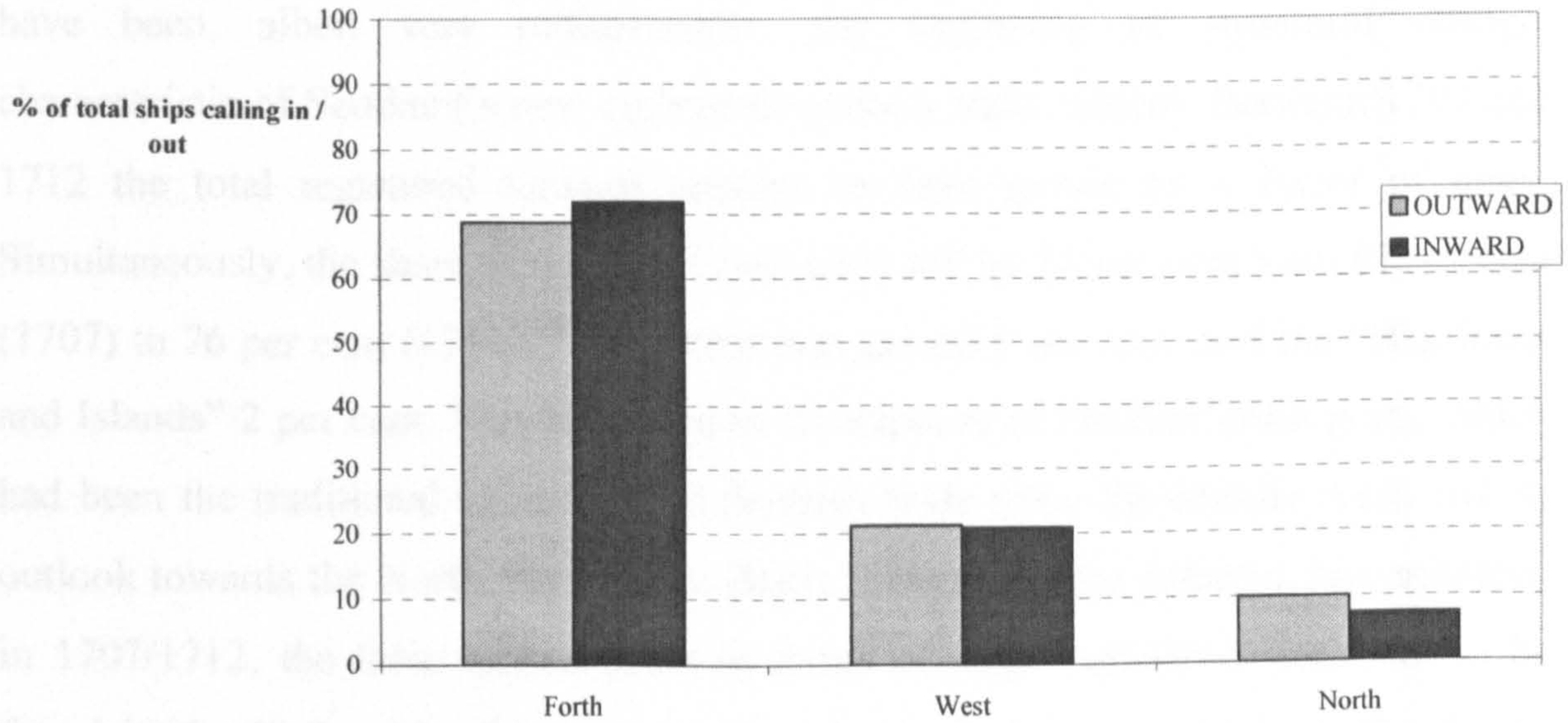
Due to the absence of customs accounts prior to 1742, and the fact that the pre-1707 Scottish customs accounts cover only a limited range of taxed commodities[32], no more than a few and very tentative remarks may be made regarding the distribution of the Scottish trade volume across Scottish ports in the first four decades of the eighteenth century. There are several possible approaches, but conclusions will have to remain more or less impressionistic. (a) Evidence on the number of incoming and outgoing traffic in Scottish ports, as well as (b) shipping registers provide some information on the number and sometimes tonnage of ships calling or registered in a particular port. (c) Customs yields (selection of import duties) might also – with some reservation – be used for this purpose, although it has been shown in chapter 3, that customs yields ought best to be used in a time series perspective on long-term *fluctuations* rather than the *structure* or distribution of trade at given points in time.[33] Only particular duties that were (α) formulated in very specific terms, each relating to only one particular commodity and which (β) remained constant over time – such as the *Impost on Tobacco* – can be used in a meaningful way as a surrogate for customs accounts when examining the distribution of the trade volume across ports.[34]

(a) Historians have used the number of ships or shipping tonnage calling in or out or being registered in a particular port as a measure of this port's commercial activity and rank in a number of ports. Although this is a notoriously unreliable measure of commercial activity[35], it might in fact support or even elucidate the

32 Ibid, *passim*.
33 Ch. 3, section 3.3.
34 See discussion on the tobacco trades, present chapter, 4.3.2.1, esp. section 4.3.2.1.2.
35 At the 1755 valuation schedule to be found in the Scottish ledgers of imports and exports (TNA, Customs 14), one *tun* of Rhenish or Hungary wine was rated at £82 10s, whilst Spanish and Portuguese wines were valued at only one-fourth of this (£22 and £21 Sterling respectively). One ton of imported flax was valued at £45; one ton of Muscovado sugar would cost £25 10s, 2,240 lbs of imported tobacco would have been worth £23 6s 8d, one ton of lead £16, one ton of bar iron £10, and one ton of coal would be worth £1, i.e. less than one eightieth of the rate for Hungary or Rhenish wine. It is immediately apparent that the use of tonnage figures provides but very little meaningful evidence for the economic historian.

argument, where proper statistical material, allowing a comparison based on monetary indicators (port books, overseas trade statistics), is absent. In the 1690s for instance, Leith and "the East" of Scotland had still dominated the trades in terms of *incoming* and *outgoing traffic*.[36]

Figure 1: The Share of the Three Regions[37] in the Overseas Traffic in the "Smout Period" (1680-86)
Smout, *Trade*, App. I.



(b) This picture is somewhat repeated in terms of *ships registered in Scottish ports in 1692*. In that year, Leith had 29 ships registered, whereas Glasgow had only 23.[38] Whilst neither of these indicators need by necessity to be highly or positively correlated to trade channelled through these ports by value, some speculative reasoning, as well as post-1700 evidence assembled by Schlote in a different context[39], in general suggest that these figures may serve as a rough proxy for absent

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36 Smout, Overseas Trade of Scotland, ch. 3, esp. pp. 51-53.

37 EAST: Alloa, Anstruther, Bo'ness, Dunbar, Dundee, Kirkcaldy, Leith, Montrose, Perth, Prestonpans. WEST: Ayr, Campbeltown, Dumfries, Greenock, Irvine, Kirkcudbright, Port Glasgow, Portpatrick, Stranraer, Wigtown. HIGHLANDS&ISLANDS: Caithness, Fort William, Inverness, Orkney, Shetland.

38 P. G. B. McNeill and H. L. MacQueen (eds.), *Atlas of Scottish History to 1707* (Edinburgh, 2nd ed., 2000), p. 275.

39 In his study on English and later British overseas trade, c.1700-1900, Schlote detected a high positive correlation between tonnage employed in the overseas trades and factual imports and exports in monetary terms over time (initially volumetric and in the nineteenth century current Sterling values). W. Schlote, *Entwicklung und Strukturwandlungen des englischen Aussenhandels von 1700 bis zur Gegenwart* (Jena, 1938), Engl. Transl., *British Overseas Trade. From 1700 to the 1930s* (Oxford, 1952).

data on monetary figures for imports and exports by ports. Thus it seems reasonable to assume that in the 1690s still, at least in physical (tonnage) and most certainly value terms as well, more trade went through Leith and the East coast ports than through Glasgow and the "West". This situation changed sometime after 1692 and almost certainly prior to 1707.

The first available post-1707 evidence is provided by shipping lists for Scotland in 1707 and 1712. These point towards an increase in the number of ships registered in Scottish ports between these two dates, as well as towards what might have been, albeit very rudimentarily, the beginning of structural change, characteristic of Scotland's new eighteenth-century trade pattern. Between 1707 and 1712 the total registered tonnage appears to have grown by a factor of three. Simultaneously, the share of the East Coast ports fell by 11 per cent from 87 per cent (1707) to 76 per cent (1711).[40] The West thus gained 9 per cent, and the "Highlands and Islands" 2 per cent. This happened at the expense of the East coast ports, which had been the traditional stronghold of Scottish trade since the Middle Ages and its outlook towards the North Sea and the Baltic, rather than the Atlantic. Nevertheless, in 1707/1712, the three largest ports in terms of ships registered were still to be found in the Firth of Forth (in rank order: Leith, Bo'ness, Kirkcaldy). The fourth place, which in 1707 had been occupied by Dundee, passed to Port Glasgow only in 1712.[41] Bo'ness, however was as much an East Coast coal and salt exporting port, as an outlet of Glasgow and is thus difficult to place in economic terms. It is furthermore interesting to note that the *number of ships* increased, whilst *average tonnage* actually declined between 1707 and 1712.[42]

The above aspects somewhat reduce the historical significance of those shipping lists. The information contained therein could be indicative of the geographical and structural changes effected by the legalisation regarding the trade in enumerated commodities, open to Scottish merchants by the Act of Union. It might

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40 BL, Harleian MS 6269, *Lists of Ships Registered at Scottish Ports*, printed in E. J. Graham, *A Maritime History of Scotland, 1650-1790* (East Linton, 2002), p. 124, Tab. 4.1.

41 Ibid.

42 Own calculations on the basis the table printed in Graham, *Maritime History*, p. 124. Graham's totals in the first column do not match with the pertaining figures given in the rows; his comments relating to the problem are nebulous. For 1707, the present author has taken as total tonnage the figure resulting from summing up the respective port figures given in the rows.

however, as well be purely coincidental. The main reasons against using these lists as evidence in a historical discussion therefore are: (1) A ship's size and value of the cargo normally carried need not be positively correlated at all. The monetary value of a ship's cargo is a better measure for trade than tonnage *in any case*. (2) It is by no means obvious that the number of ships registered in a certain port is by necessity strongly positively correlated with the level of this port's commercial activity (£Sterling) or the number of ships calling in and out and loading or unloading a cargo at this port. This is because denizens of a certain port might charter ships that are registered elsewhere. Or vice versa, ships registered at port A might be predominantly employed in port B and only seldom call in directly at A. Foreign traders and foreign ships were normally involved in the overseas trades as well.[43] (3) As in fact many of the ships employed in the Glaswegian tobacco trades prior to the 1720s were not registered in Glasgow but chartered from England[44], those surviving shipping lists from 1707 and 1711 presumably not only seriously under-estimate commercial activity in general, but also distort (4) the relations between ports in terms of gross total trade handled. (5) Much of Scottish shipping was also engaged in coastal domestic traffic and never carried any exports overseas. There remains for instance the – of course very speculative – option that all gains of the West in terms of registered tonnage, both in absolute as well as relative terms, might have been entirely absorbed by either (α) an increase in the bulk, low-value commodity trades (such as coal, salt or timber), or (β) the *domestic* traffic in general. Neither would, in value terms, by necessity have contributed to an increase in the value of foreign trade.

Thus a decline in the average tonnage of ships might be based mainly on an increase in the coastal coal trades in the East (Forth ports) whilst Glasgow's commercial activity would be under-represented in the shipping lists, as a large share

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43 At least evident from Scottish customs accounts examined with regard to re-exports of colonial products to German ports in the later 1750s and early 1760s. Even though English Mercantilism generally sought to keep foreign carrying activity at as low a level as possible, there were times when neutral (Hamburg) shipping was increasingly resorted to by Glaswegian "tobacco lords". See ch. 8 below. E. F. Heckscher, "Mercantilism," *EcHR*, VII (1935-6), reprinted in D. C. Coleman (ed.), *Revisions in Mercantilism* (London, 1969), p. 27.

44 G. S. Pryde, *Scotland from 1603 to the Present Day* (London, 1962), p. 74. Price, "Glasgow, the Tobacco Trade, and the Scottish Customs," pp. 15-17.

was carried in chartered vessels. Suffice it to cite but one example. The doubling of Kirkcaldy's tonnage between 1707 and 1712 (from 1,690 to 3,867 registered tons[45]), was achieved by an increase in the number of vessels registered at that port by a factor of four. As the average size of vessels thus decreased by 50 per cent, and much of Kirkcaldy's trade consisted of domestic (coastal) traffic in coal, it is much more likely that the above-average increase in tonnage and number of ships ports like Kirkcaldy, Alloa and Irvine would – instead of pointing to an increase in the overseas trades – rather be indicative of an expansion in the domestic coastwise shipping, mainly of coal and grain.[46]

(c) Therefore the surviving shipping lists cited above by no means represent a reliable indicator of structure and changes in the volume of trade by Scottish ports involved in the trades after 1707. Nor are *customs yields* a much better source. A comparison of total customs revenue (money plus bonds) for the same year tells an entirely different story which, however, might be equally untrue. Whilst in 1708, Glasgow paid 1.5 times as much in total customs revenue as Leith, it paid 2.5 times as much in 1712 without significantly altering its share in *total* customs revenue paid (47 per cent: 1708; 49 per cent: 1712). Leith on the other hand, paid 30 per cent of total customs revenue in 1708 and only 20 per cent in 1712. In the medium-run the following picture unfolds:

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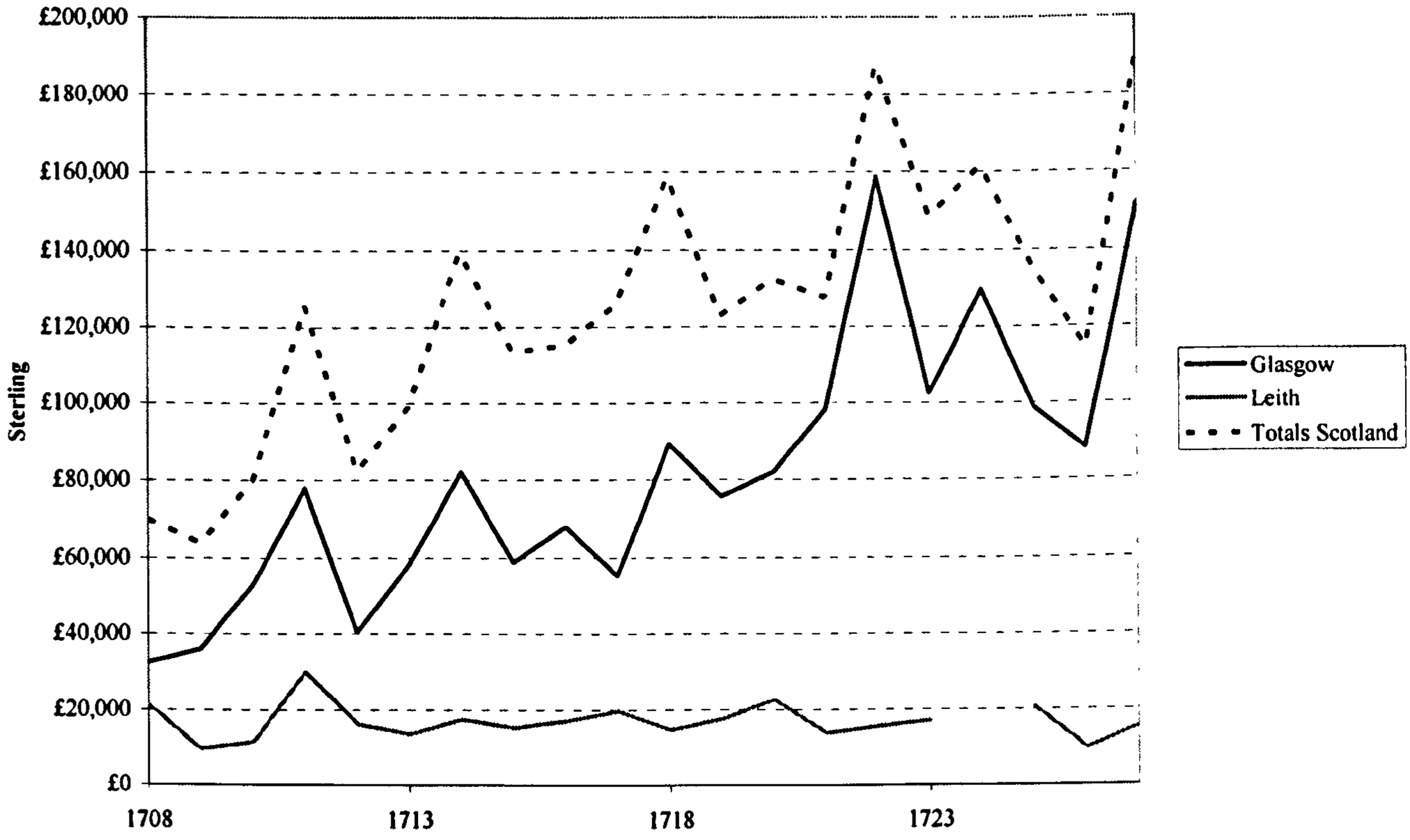
45 BL, Harleian MS 6269.

46 These bulk trades were carried out in vessels that were small compared to ocean-going ships needed for the Atlantic trades. This commercial activity without doubt received a positive stimulus from the growth of Edinburgh and other major cities during the eighteenth century, as well as the exemption of coal travelling within the Firth of Forth from domestic coal duty in 1709, which in many ways made the Firth of Forth effectively a separate economic region on its own (just as the West of Scotland and the North West of Ireland were one integrated economic area). Whatley, *Scottish Society*, p. 58, p. 73.

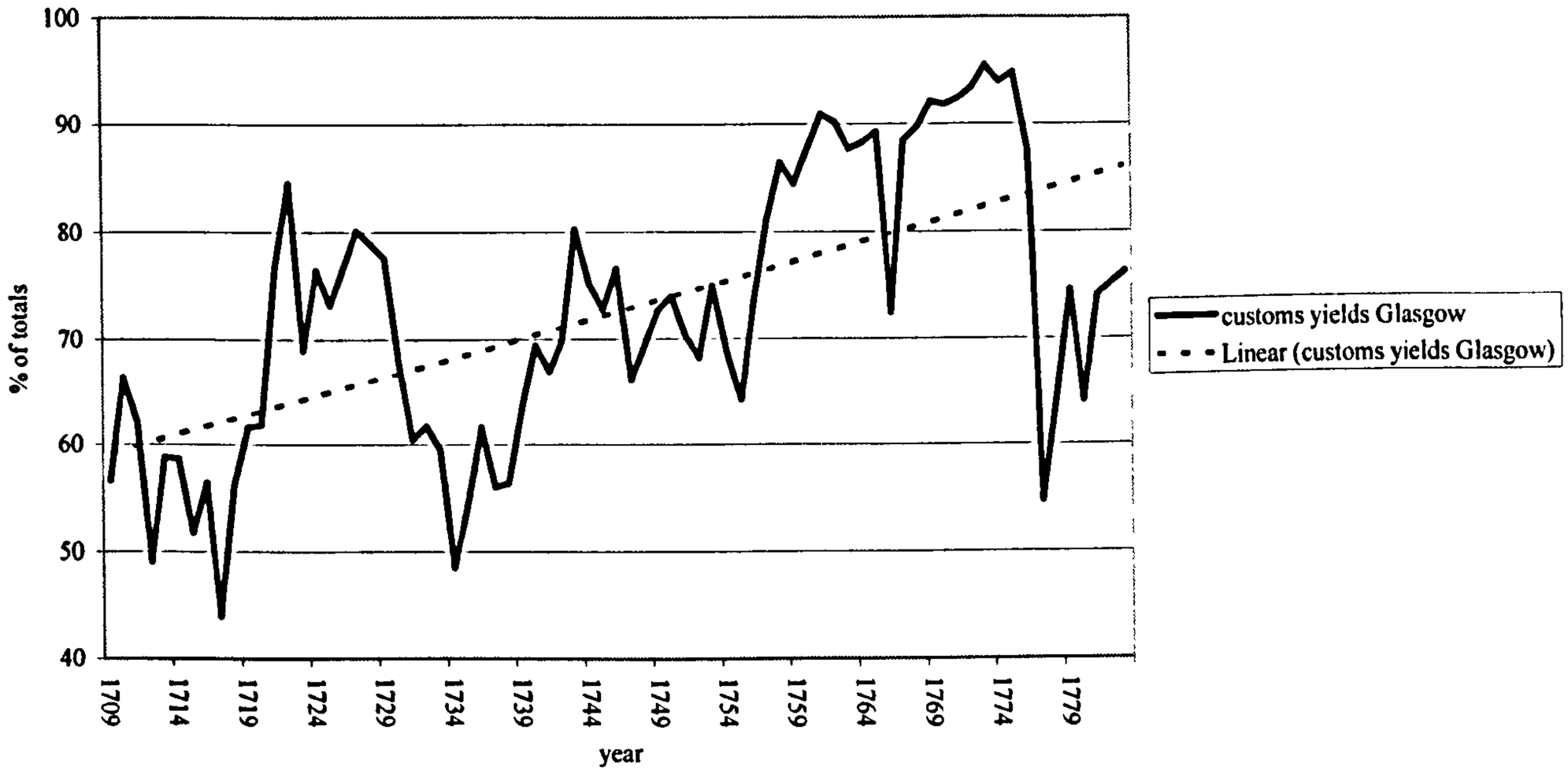
Figure 2: The Development of Total Customs Revenue (money+bonds), Leith and Glasgow, 1708-1727
NAS, E501/1-20.



It can be easily shown that these customs yields are in the main biased by the colonial trades, mainly tobacco imports, on which an effective net tax rate of up to 240 per cent of its 1755 valuation was levied.[47] Regardless whether or not the item was re-exported subsequently, yields from the tobacco duties would always be booked to full extent to the credit side of the Board of Customs General balance sheets, i.e. would be levied as if a 240 per cent tax actually applied.

47 Ch. 2, section 2.2.1.

Figure 3: Glasgow's Share in Scotland's Gross Customs Yields (1709-1783)
Customs General Accounts: NAS, Board of Customs General Accounts, E501/2-75



It is immediately obvious that a share of normally well above 70 per cent of total customs gross revenue cannot be taken even as a rough approximation of Glasgow's share in the overseas trades in current value terms.[48]

Clearly the absence of customs accounts, i.e. actual data on commodities traded, 1707-1742, rules out reliable conclusions as to changes in the weight of the several ports in Scotland's total overseas trade, 1707-1742. It seems, however, as though the Glaswegian outports attained a commercial predominance over Leith and other ports of the West coast from the early years of the century onwards, mainly due to the developing trade in tobacco. This, to be discussed shortly below[49], would have made for a structural shift that occurred even prior to the 1730s, which are often named as the take-off of the tobacco trades.

The following sections (4.3.1-4.3.4) are intended to shed some light on the fluctuations in the Scottish trade volume, 1700-1760, in those cases, where the available statistical material allows a more detailed discussion. Due to the nature of the sources, this discussion will have to be limited to impressionistic remarks as to

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48 This is explainable by a bundle of criteria, mainly the high tax rate on tobacco, the fact that the bulk of imports into many eastern ports (such as Bo'ness, Montrose and Dundee) paid no import duty (flax, hemp, madder), and the at times considerable concentration of the tobacco trades in the Glaswegian ports.

49 Present ch., section 4.3.2.1 on tobacco below.

overall fluctuations, 1700-1760 (4.3.1), select branches of the *recorded* commodity trades, mainly in tobacco, wine, and grain, as well as trade with the Baltic (4.3.2), some impressionistic evidence on largely unrecorded exports to England (4.3.3), as well as one characteristic branch of Scottish illicit trading activity: the tea smuggling business, which attained considerable dimensions after 1740 (4.3.4).

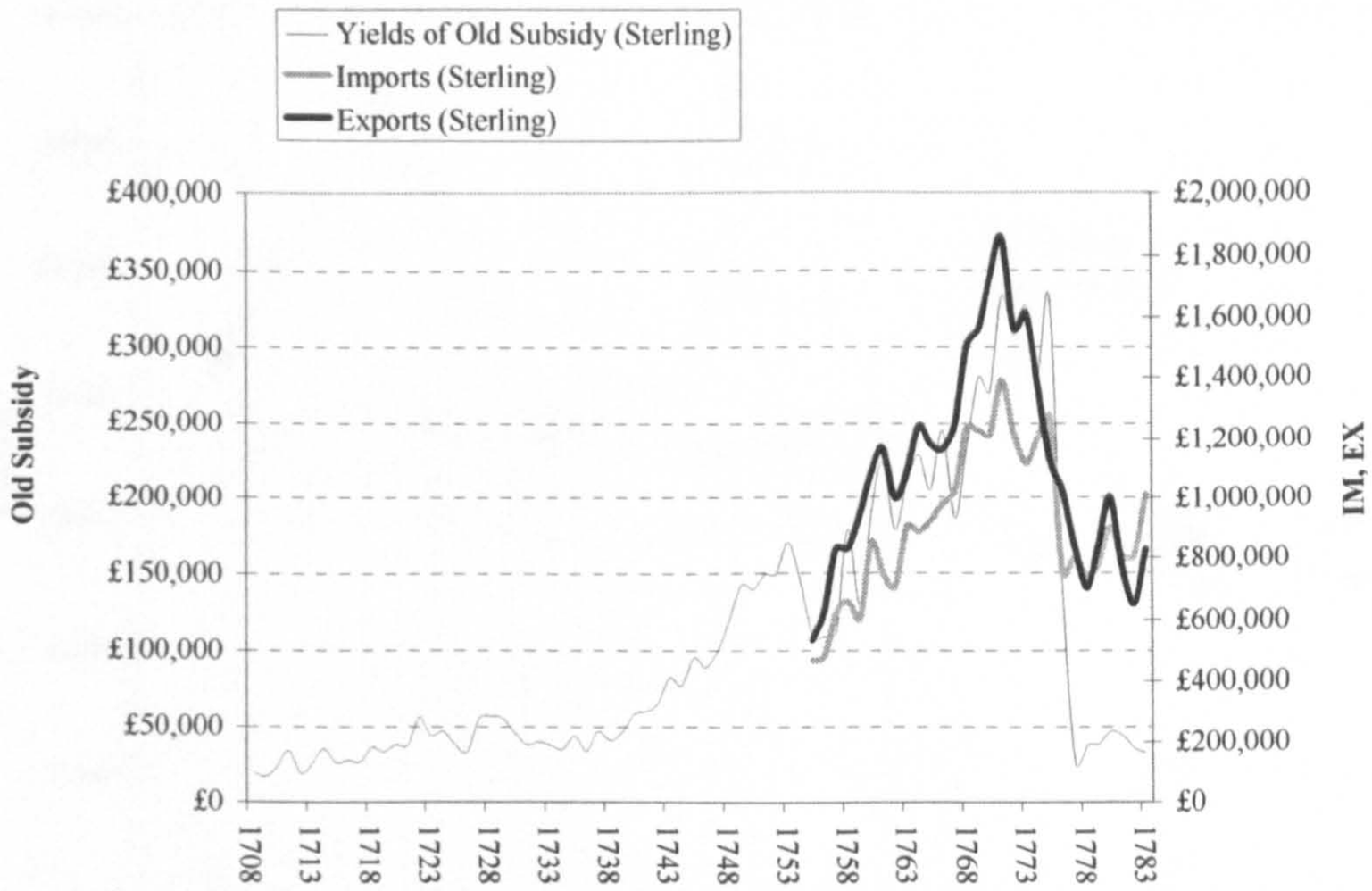
4.3 Fluctuations and Trends in Scotland's Overseas Trades, 1707-1742/1755

4.3.1 General Fluctuations, Trends and Structure, 1700-1760

As comprehensive trade statistics do not commence prior to 1755, and the customs accounts, which would allow a re-construction of the Scottish balance of trade between 1743 and 1755 (and thereafter), have not been fully examined yet, observations regarding the scale and scope of Scotland's trade volume need to remain somewhat conjectural for most of the period under consideration. What the discussion can achieve is tracing possible growth rates, as well as benchmark dates in which the growth rate of Scotland's gross total trade might have changed. The overall trend, however, is fairly clear. Commercial expansion occurred since the middle of the 1730s (Fig. 4); before that date the trend in Scotland's total trade was only a very moderately expanding one.

Figure 4: Scottish Overseas Trade, 1708-1783

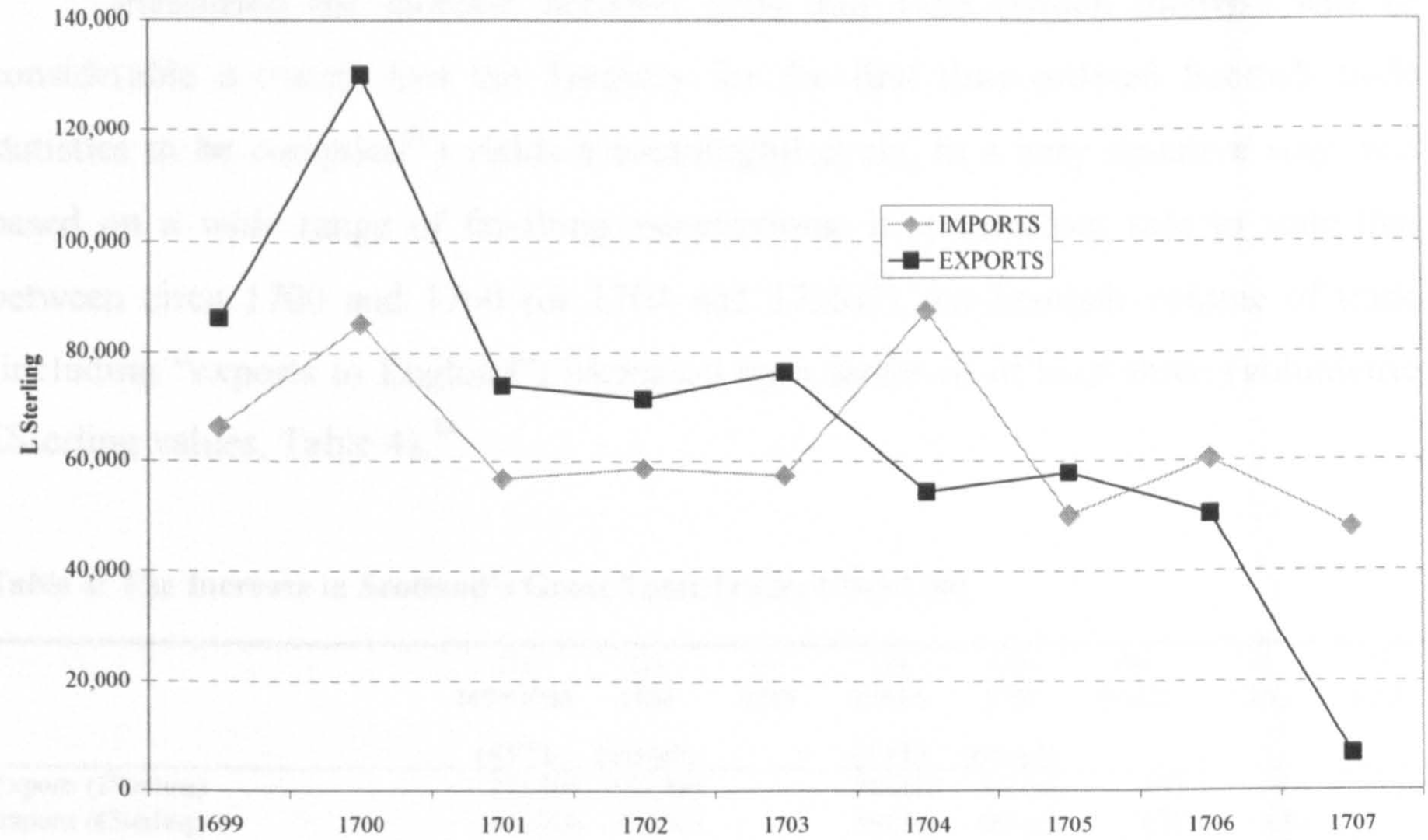
Imports, exports, Scotland: TNA, Customs 14; missing totals for 1763, 1769: NLS, Ms 60. Customs yields Scotland: NAS, E501/1-76, money and bonds.



Without doubt the Union of 1707 coincided with a trough in trade levels, which had its roots not only in English economic warfare (in order to press through an incorporating Union), but might also have been a backlog of a series of deficient harvests in the 1690s, and accordingly a generally depressed Scottish economy. Trade with *England* for instance, accounting for about 40 to 50 per cent of Scotland's total trade, was on the whole declining since 1700 (Fig. 5).

Figure 5: Scottish Trade with England, 1699-1707 (£Sterling)

TNA, Customs 3. Figure for 1707: 1 January – 30 April 1707. Valuations: English current foreign trade valuations



The trough was most pronounced in 1704 and 1706. In these years Scotland's balance of trade with England (as well as her overall balance) was negative.[50] Cattle exports, one of the mainstays of Scottish economic activity had been declining after 1700. This development was reinforced by the threat of a ban on cattle imports from Scotland to England, Scotland's only foreign market for this product, in 1704, in order to press the Scots into a political Union. This led to the temporary disappearance of cattle from recorded exports to England (1704-1707). Scottish *overseas* trading activity was further kept at a seriously sub-optimal level by an essentially powerless and ineffective Scottish navy (numbering three warships in

50 As an analytical tool, Scotland's "balance of trade" can only be used in the most superficial sense. The pricing employed in the English customs ledgers strictly speaking does not permit the calculation of Scotland's balance of trade with England. But allowing for all possible biases in the monetary figures and physical amounts contained in the English trade statistics, the reverse situation – i.e. a positive balance on current account with England – is an entirely unlikely scenario. Trade was clearly imbalanced in England's favour, causing an outflow of specie out of Scotland. Contemporaries widely lamented upon this. Both NLS, Fletcher of Saltoun Papers, MS 17498, f. 73 with regard to the overall balance of trade, as well as the English customs ledgers- with regard to the balance of trade with England, yield a negative value for 1704. Trade with England would probably still have been in deficit, if all cattle exports from Scotland to England had been considered.

total) and the frequent presence of French, Dutch and English privateers in Scottish waters up to 1707.[51]

Measuring the increase between 1704 and 1755 (which likewise was so considerable a trough that the Treasury for the first time ordered Scottish trade statistics to be compiled[52]) yields a meaningful cycle. In a very tentative way, and based on a wide range of far-flung assumptions, it is therefore safe to state that between circa 1700 and 1760 (or 1704 and 1755)[53], the Scottish volume of trade (including "exports to England") increased by a factor of at least three (volumetric £Sterling values, Table 4).[54]

Table 4: The Increase in Scotland's Gross Total Trade, 1700-1760

	(1) 1699/1703 (AVE)	(2) 1704 (trough)	(3) 1709	(4) 1755-9 (AVE)	(5) 1755 (trough)	(6) (5)/(2)	(7) (4)/(1)	(8) (4)/(3)
Exports (£Sterling)	175,305	184,300		754,087	535,567	2.91	4.3	
Imports (£Sterling)	129,730	356,000		567,943	465,401	1.31	4.38	
Gross customs yields (index 1755=100)			29.51	100				3.39

Most of this growth fell into the period post-dating the mid-1730s. It roughly coincided with the tobacco cycle 1736-1776, which is quite obvious from the above graph on customs yields (and which will be subject to further discussion below).

In 1730 Sir John Clerk of Penicuik, in an account that unfortunately closely missed the "take-off" of Scotland's overseas trade by just a few years, was not entirely wrong to remark that "[a]s to our trade immediately after the Union it stood thus as it still does".[55] Without doubt Penicuik referred chiefly to the composition of the Scottish trade volume. But even in terms of fluctuations, the overall increase between 1707 and 1730 would also have been moderate at best, as the customs yields evidence, distilled into Figure 4 above, suggests. This changed significantly shortly after Penicuik wrote his memoirs. In about 1734 or 1736, the long eighteenth century

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51 Venturing as far inland as into the Firths of Clyde and Forth, the latter often stopped and randomly searched incoming Scottish ships suspect of contraband from the point of view of the English Navigation Acts. E. J. Graham, "In Defence of the Scottish Maritime Interest, 1681-1713," *SHR*, LXXI (1992), pp. 88-109.

52 See ch. 3, section 3.2.2.

53 1699/1703 and 1755/59 to be exact.

54 Assuming with Smout that trade with England in and around 1707 accounted for 50 per cent of Scotland's total trade.

55 Sir John Clerk, *Observations*, printed in Campbell & Dow (eds.), *Source Book*, p. 107.

Scottish overseas trade cycle (1734/6-1776), characteristic of the subsequent overseas trade pattern, commenced. Visible from the post-1755 trade statistics which are not fully indicative of this cycle, as they commence in a temporary, yet considerable slump, in less than 20 years (1755-1771) a leap was made, which, in mere terms of speed, matched any development previously or simultaneously experienced by the English.[56] This cycle came to an end in the 1770s, with an abrupt decline in the volume of trade by about 55 per cent between 1771 and 1776.[57]

The precise *composition* of the Scottish trade volume 1707-1755 and possible changes therein are of course unknown, as the customs accounts have been lost (1707-1742) and surviving statistics capture only a select range of commodities of interest to the Treasury, mainly tobacco, grain and wine. But again Clerk of Penicuik's observations (1730) provide a good surrogate insight into the structure of the Scottish trade volume in the middle of the "Dark Age" between 1707 and 1755. According to Sir John the basic items on Scotland's domestic export account in 1730 were still cattle, linen and, to a lesser extent, woollens, lead, coal and grain, in the same way as they had been at the time of Union. Only a recently-emerged re-export activity, mainly of tobacco, needs to be added, which, as Penicuik remarked, had undergone a time of protracted depression in the decade preceding 1730.[58] With regard to *imports* on the other hand Clerk was keen to stress the significance of (legal as well as illicit) imports of French wines and spirits. These would have led to a severely adverse balance on current account, draining the Scottish economy of liquid funds, as "the French take little or nothing from us by way of bartar [*sic*]."[59] It is interesting to note that this situation had been noted and lamented upon as early as the 1680s.[60]

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56 R. Davis, "English Foreign Trade, 1660-1700," *EcHR*, Second Series, VI (1954), pp. 150-166; Id., "English Foreign Trade, 1700-1774," *EcHR*, Second Series, XV (1962), pp. 285-303.

57 The obvious discrepancy in the decline of gross total trade and customs yields 1771-1778 can be explained by the near complete collapse of tobacco imports 1774-1776, and the fact that many commodities important for the expanding textile industry, imported mainly through the East coast ports, came in duty free (flax, linseed, madder).

58 Sir John Clerk, *Observations*, printed in: Campbell & Dow (eds.), *Source Book*, pp. 107-110.

59 Ibid., p. 110.

60 At that time contemporaries reckoned that imports from France exceeded exports thence by a factor of four. This adverse balance was largely settled in "money and bills". Smout, Overseas Trade of Scotland.

Penicuik also stressed two related aspects that were very important in a statistical sense. (a) Much of Scotland's foreign trade in 1730 still went to or via England, including external finance.[61] Available trade statistics, by omitting Scottish-English traffic (and payments in general) thus fall short of a considerable amount of domestic economic activity and "exports" post-1707. (b) The limits of contemporary trade statistics in terms of invisibles accruing to Scotland out of a trading activity are also apparent.

The discussion will now proceed by tracing the developments in the commodity trades in those instances (commodities) for which statistics are available. The nature of the available material does not, however, normally allow the analysis of *markets* for these products. The best available evidence relates to goods that were either taxed highly (tobacco, wine), or products the trade of which was regulated by import prohibitions and export bounties (grain). These trades attracted a considerable interest of the Treasury and smugglers alike, and were thus most likely to be recorded. Fortunately, Scotland's most important item traded *overseas*, tobacco, was monitored by the authorities fairly closely from the early years onwards.

4.3.2 The Recorded Trades

4.3.2.1 Tobacco and other Colonial Goods

The following section will primarily be concerned with aspects in the Scottish *tobacco* trades, which have been either overlooked, or which will be important in terms of the argument in chapter 6. Due to the availability of the Sound Toll Registers, however, this discussion can be augmented by some further remarks on the Scottish trade in colonial goods in general.

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61 Sir John Clerk, *Observations*, printed in Campbell & Dow (eds.), *Source Book*, p. 108. But he was convinced for instance that partly the sale of Scots cattle and linen in London paid for the importation of wine into Scotland from Bordeaux.

4.3.2.1.1 Trends and Cycles in the Tobacco Trades

Scottish overseas commerce was driven by the tobacco trades. This is indicated for instance by a correlation coefficient of R=+1 for *Old Subsidy* and *Impost on Tobacco* over the period under consideration.[62] A stagnation or at times even depression in the Scottish tobacco trades usually equalled and translated into a general stagnation or depression of gross total Scottish overseas trade. By the same token a depression in the overseas trades would neither by definition have had strong roots in, nor could be seen as a major cause of or trigger for, a general macro-economic depression.

During the first two decades following the Union the Scottish tobacco trades were neither spectacular nor subject to a particularly significant trend. Officially recorded tobacco imports hovered around the five-million-margin per year (Figure 6).[63]

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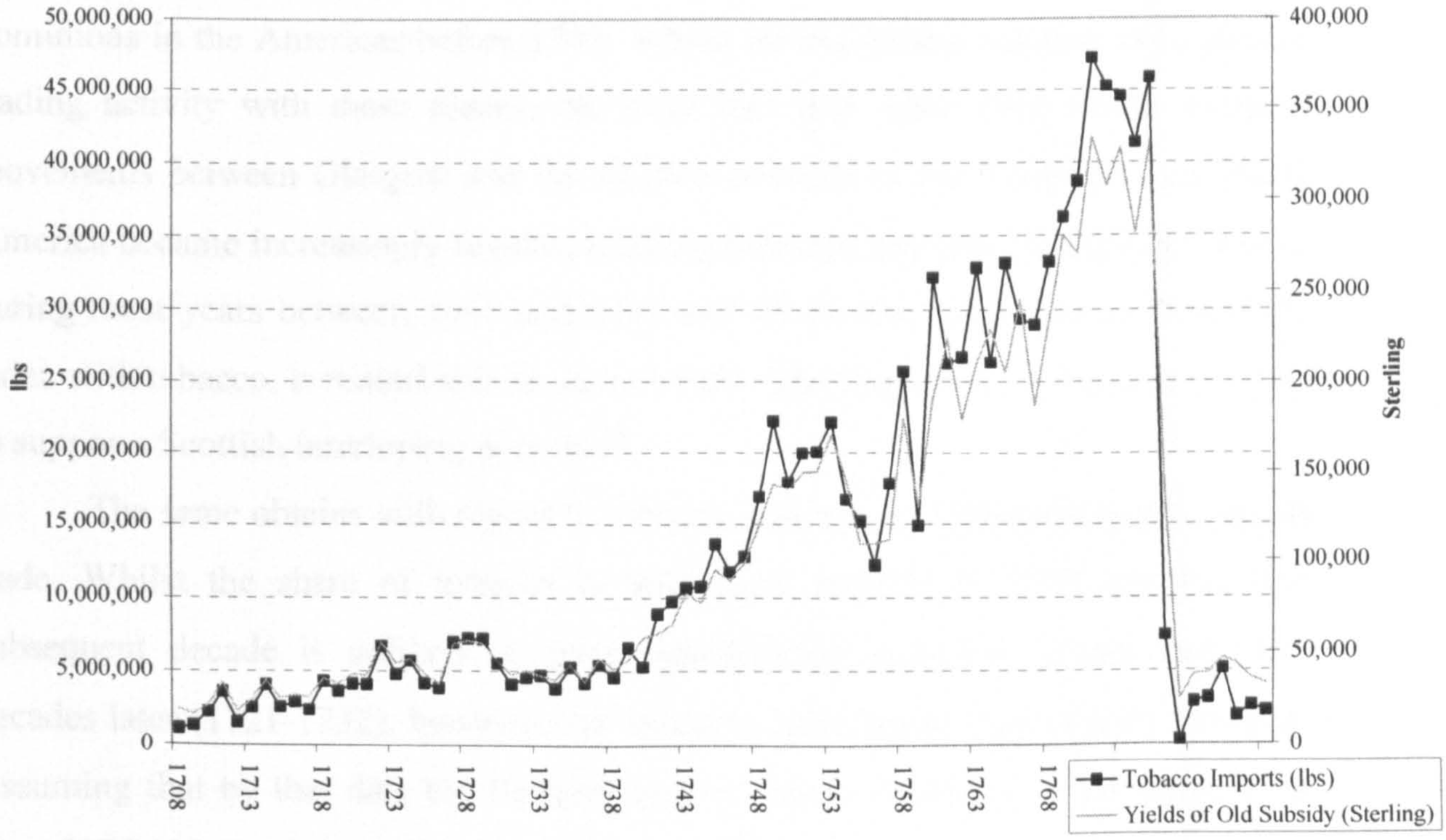
62 Since the *Impost on Tobacco*, which every legally imported lb of tobacco had to pay, remained virtually unaltered throughout the eighteenth century, it represents a fairly reliable volumetric index for fluctuations in tobacco imports. If seen in the direction *Impost on Tobacco*⇨*Old Subsidy*, a high correlation coefficient of R=+1 is self-explanatory, if not tautological, as every lb of tobacco imported also had to pay *Old Subsidy*. In the other direction, however, not every commodity paying *Old Subsidy* was liable to the *Impost on Tobacco*. If the interpretation of the customs yields figures as suggested in chapter 3 above is correct, the evidence therefore implies a totally uniform movement of tobacco imports and total Scottish imports overseas, although after 1755, tobacco not normally accounted for more than 40 per cent of total Scottish imports (£Sterling). By the same token this aspect suggests virtual uniformity in the fluctuations of tobacco trade and gross total overseas trade over the entire eighteenth century (1708-1783). Even though a whole range of imported commodities was freed from duty, and thus entered the overseas trades without being covered by the customs yields series, tobacco determined the overall cyclical movements by its sheer value in total imports (and exports). The rates and modalities of levying the *Impost on Tobacco* remained constant from the time the duty was introduced in 1685. S. Baldwin, *A Survey of the British Customs* [...] (London, 1770), p. 185.

63 A short comment might be in order on how the figures have been derived, as the early part of the series (pre-1721) is based on some speculative arithmetic. Most of the figures on tobacco imports have been taken from J. M. Price, *France and the Chesapeake. A History of the French Tobacco Monopoly 1674-1791, and of its Relationship to the British and American Tobacco Trades*, 2 Vols. (Ann Arbour, 1973), Vol. II, Appendix, pp. 843-845, and Id., "Glasgow, the Tobacco Trade, and the Scottish Customs," Table 1. Price however, provides no direct evidence on factual tobacco imports prior to 1721 and between 1732 and 1737, as neither reliable abstracts from Scottish port books nor related material from the Edinburgh customhouse has survived for these years. There is a possibility of overcoming this problem. The actual number of tobacco lbs legally imported might be directly computed from evidence of duty paid on them, provided an appropriate conversion factor is found, as in those years prior to the change in legislation 1721-3, for which tobacco import figures are available, the total yields of the *Impost on Tobacco* and total number of lbs of tobacco imported move in total unison, as indicated by a correlation coefficient of R = +.999977. Furthermore, the *Impost on Tobacco* moved in close proximity – although not in unison – with total imports of tobacco in the long run as well (cf. figures given in Price, *France and the Chesapeake*, Vol. II, Appendices, with NAS, E501/1-76). Thus it appears fairly

Figure 6: Imports of Tobacco into Scottish Ports, 1707-1783

Tobacco imports 1721-1732, 1737-1783: J. M. Price, *France and the Chesapeake. A History of the French Tobacco Monopoly 1674-1791, and of its Relationship to the British and American Tobacco Trades*, 2 Vols. (Ann Arbour, 1973), Vol. II, App. pp. 843-845.
1708-1721, 1733-1736: interpolated by the present author from TNA, T36/13, Pt 2, *Accounts of the Gross and Net Duties on Tobacco*, 1727-1731 and NAS, E501/1-14, 26-30.



The pattern as such was cyclical. In official figures, the *English* tobacco trades, however, expanded faster than the Scottish trades during the 1720s and 1730s. Accordingly, the latter never exceeded about 19 per cent of the British totals.[64] The

safe to assume that at least in the early period, i.e. prior to the first change in the legislation applying to fixed discounts applicable in tobacco imports (1723), one particular sum of money paid for the *Impost on Tobacco* (money plus bonded payments), levied at a fixed rate of duty with fixed regularly applicable discounts, always corresponded to roughly the same amount of tobacco lbs imported. Evidence derived from Treasury statistics on Scottish tobacco imports 1725-1731 suggests a conversion factor of 94.16081, i.e. at that time £1 Sterling of *Impost on Tobacco* paid duty for 94.16081 lbs of tobacco *on average*. Assuming that this was not different in the decades before, as the first change in the tobacco taxation schedule occurred in 1723, Price's series of tobacco imports has been projected backwards from 1720 to 1708 using total yields of the *Impost on Tobacco* (obtained from NAS, E501/1-72, "money" and "bonds"), multiplying the latter by the above conversion factor. It should be noted that the conversion factor declined to 90.921 (average for 1720-1783), reflecting subsequent changes in the legislation and administrative framework applicable in the tobacco trades.

64 Price, "Glasgow, the Tobacco Trade, and the Scottish Customs," pp. 32-34, Table 1.

"golden age"[65] of the Scottish tobacco trades was yet to come. Nevertheless the overall trend of total tobacco imports into Scottish ports between 1708 and 1736, the beginning of the "long eighteenth century trade cycle", was already a moderately positive one.

Scotland's characteristic "eighteenth-century overseas trade pattern" therefore was already on its way in the 1720s; its beginnings can be traced back prior to the Union. Smout has charted the evidence of direct Scottish trading with the English dominions in the Americas before 1707. Whilst inconsiderable relative to England's trading activity with these places, the mere fact that since 1665 direct shipping movements between Glasgow and the English colonies in the Caribbean and North America became increasingly regular, totalling between one and 10 ships per annum during most years between 1660 and 1707 and 70 for the entire period, frequently laden with tobacco, is remarkable in its own right. The English navy frequently failed to suppress Scottish interloping activity.[66]

The same obtains with regard to tobacco's weight in Scotland's total overseas trade. Whilst the share of tobacco in total legal imports in 1707 and the first subsequent decade is unlikely to have significantly exceeded 10 per cent, two decades later (1721-1732), however, the situation had already significantly changed. Assuming that by that date the Scottish import volume would have increased to at least £186,000 Sterling (1755 value/2.5), tobacco might have attained a share of 30 per cent in total Scottish imports.[67] About the same relation obtains for the average share of tobacco in total Scottish imports at the end of the period under consideration, 1755-59, as given in TNA, Customs 14. Thus by 1730, the pattern of Scotland turning into a warehouse economy was already fully under way. Unless this development was due purely to an increase in the efficiency in detecting smuggling by the Customs (which might have been the case, see below), this would argue in favour of a relatively smooth transition from an already respectable yet entirely

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65 T. M. Devine, "The Golden Age of Tobacco" in Id. and G. Jackson (eds.), *Glasgow, Vol. I. Beginnings to 1830* (Manchester - New York, 1995), pp. 139-183.

66 Smout, Overseas Trade of Scotland, pp. 60-62.

67 Assuming that tobacco imports totalled 5489182 lbs on average (11 year average, 1721-1731), and that total imports stood at about 186,000 Sterling, c. 1730.

illegal colonial business in Glasgow prior to 1707, to a more secure framework of colonial trading thereafter.

Thus the Union 1707 did not *create* the framework for the Scottish colonial trades but merely *increased* the institutional safety of an already existing trading pattern. It reduced the risks and transaction costs for what was correctly seen as the key to commercial success and established the basis for sustained growth in subsequent decades. In this way, however, the full impact of Union came with a time lag of 20 to 30 years.[68] One factor keeping the level of the Scottish colonial trades low between 1707 and 1736 were for instance repeatedly occurring cyclical depressions. These were mainly due to factors such as stagnant continental markets (a backlog of the "seventeenth-century crisis"?), a shortfall of American supply, or a combination of the two.[69] As the success of the Glaswegian trades partly – and in the first three decades after the Union predominantly – lay in "free trading", i.e. customs evasion, cyclical depressions and a generally low trend level for imports might also have been the result of under-recording of factual imports and exports.[70] Another important aspect in this regard would be path dependency, a long-run factor less dependent on purely cyclical factors such as prices in Europe and supply in America.

English merchants, accustomed to a lucrative and successful legal colonial business since the middle of the seventeenth century, who would have developed a correspondingly large operational scale in terms of sales and capital levels, clearly had an initial advantage over Glasgow. Structural problems which might inhibit early growth and keep overall Scottish (Glasgow) growth rates low after 1707 – when the English privateers had disappeared from Scottish waters – might accordingly be identified *inter alia* as (a) a relatively modest fleet of ocean-going vessels registered in Glasgow in 1707 and subsequent decades. This forced Glaswegian tobacco merchants to charter additional vessels in England, as long as the size of the Glaswegian merchant fleet did not yet meet the requirements of an already expanding colonial business.[71] (b) As the colonial trades were highly capital-intensive, apart from ships (fixed capital), the sums of *circulating* capital needed for

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68 See Figure 6 above.
69 Price, "Glasgow, the Tobacco Trade, and the Scottish Customs," p. 34.
70 C. A. Whatley, *The Industrial Revolution in Scotland* (Cambridge, 1997), p. 21.
71 Pryde, *Scotland*, p. 15, p. 17.

such various purposes as the payment of import and warehousing duties, the fitting of ships, provision for crews, salaries and wages for crews and masters were considerable. The foundation and subsequent expansion of a successful colonial business in the south-west of Scotland might have required either much external finance, which was obviously not yet available to the amounts necessary in Glasgow, or an initial phase of build-up. This could have made for low growth during the early decades of the century (1707-1736).

There is, however, another side of the story. The evidence relating to phenomena such as the imputed "depressions" in the tobacco trades in the 1720s and an apparent time lag of "catching-up" in the official figures between c. 1707 and 1736, is largely based on officially recorded figures for tobacco imported into Scottish ports. But the 1710s and 1720s and early 1730s were also renowned for an abysmally high level of smuggling activity, especially in the south-western ports of Scotland (see below). To a certain extent this appears to be part of the later success story and earlier "depression" of official figures. A first "crack-down" on a corrupt and inefficient Scottish customs system took place in 1721-3. These measures included the abolition of an independent Scottish Board of Customs until 1742 and a wide-spread replacement spree of English for Scottish Customs officials.[72] The effectiveness of the measures in 1721-3 however failed its reality test. In 1732 an official enquiry was launched by the Treasury again, applying to all Scottish outports and their records between 1727 and 1732 with regard to fraudulent practice in the tobacco trades. The accounts and reports at the end of this enquiry (1732) found *inter alia* that "little above 300 hhds of Tobacco pay duty each Year, tho the real quantity consum'd in Scotland is probably ten times as much".[73] Whilst this was perhaps an exaggeration of the true level of smuggling, it is nevertheless clear how little belief was placed by contemporaries in officially declared imports of tobacco into Scottish ports as late as the early 1730s. Furthermore, the Board of Customs obviously put a great stress on the size of the *domestic* (Scottish and English[74]) market for illegal

72 J. M. Price, "The Rise of Glasgow in the Chesapeake Tobacco Trade, 1707-1775," *WMQ*, II (1954), pp. 179-199, at p. 186.

73 TNA, T36/13, Pt. 2, *Account of Gross and Net Produce on Tobacco Imported Into Scotland, 1724-1731*, 21 December 1732.

74 The north of England was supplied with cheap tobacco from the Scottish ports.

tobacco, somewhat discrediting the often-imputed multiplier effects arising from a supposedly flourishing re-export business to the European continent. If it is accepted that smuggling in the 1720s amounted to levels of up to or even exceeding 50 per cent of legally declared values[75], a depression in legally recorded figures in the 1710s and 1720s might in theory be due entirely to an under-recording of factual imports that might have been constant or even increasing.[76]

In the long-run, however, slow growth and depression – if the latter was the case – in the 1720s, by weeding out the weaker marginal firms, also appears to have created a "stronger and more viable merchant community in Glasgow [...] and helped to create the golden age of the 'tobacco lords'."[77] From the middle of the 1730s onwards, the Scottish tobacco trades underwent a transformation that deserves to be called spectacular. Due to the considerable growth rates attained between the mid-1730s and early 1770s, as well as the fact that tobacco at times reached levels around and above 40 per cent of total Scottish imports and exports after the middle of the century (in volumetric terms), these trades have received particular attention, not merely in their own right but also in terms of their imputed significance for the Scottish macro-economy.[78]

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75 R. C. Nash, "The English and Scottish Tobacco Trades in the Seventeenth and Eighteenth Centuries: Legal and Illegal Trade," *EcHR*, Second Series, XXXV (1982), pp. 354-372.

76 In this way, the timing of tobacco cycles becomes especially difficult for the first four post-Union decades, as the official Treasury figures for tobacco imports and re-exports might be profoundly fictitious.

77 Price, "Glasgow, the Tobacco Trade, and the Scottish Customs," p. 36.

78 Price, "Rise of Glasgow"; Id., *France and the Chesapeake*; Id., "New Time Series for Scotland's and Britain's Trade with the Thirteen Colonies and States, 1740 to 1791," *WMQ*, XXXII (1975), pp. 307-325; Id., *Capital and Credit*; Id., "Glasgow, the Tobacco Trade, and the Scottish Customs"; Id., "A Revolution of Scale in Overseas Trade: British Firms in the Chesapeake Trade, 1675-1775," *JEcH*, XLVII (1987), pp.1-43. See also further topics covered in his essay collections: Id., *Tobacco in Atlantic Trade. The Chesapeake, London and Glasgow 1675-1775* (Aldershot, 1995); Id., *Overseas Trade and Traders. Essays on Some Commercial, Financial and Political Challenges Facing British Atlantic Merchants, 1660-1775* (Aldershot, 1996); Id., *The Atlantic Frontier of the Thirteen American Colonies and States. Essays in Eighteenth Century Commercial and Social History* (Aldershot - Brookfield, 1996). T. M. Devine, *The Tobacco Lords. A Study of the Tobacco Merchants of Glasgow and their Trading Activities 1740-1790* (Edinburgh, 1975). Id., "Colonial Commerce and the Scottish Economy" in L. M. Cullen and T. C. Smout (eds.), *Comparative Aspects of Scottish and Irish Economic and Social History 1600-1900* (Edinburgh, 1977), pp. 177-190; Id. "Golden Age"; Id., "The Union of 1707 and Scottish Development," *Scottish Economic and Social History*, V (1985), pp. 23-40; Id., "The Colonial Trades and Industrial Investments in Scotland, c.1700-1815" in P. Emmer and F. Gaastra (eds.), *The Organization of Interoceanic Trade in European Expansion, 1450-1800* (Aldershot, 1996), pp. 299-312; Id., *The Scottish Nation. A History 1700-2000* (New York, 1999); Id., *Scotland's Empire 1600-1815* (London, 2003); Id., "Scotland" in R. Floud and P. Johnson (eds.), *The*

4.3.2.1.2 Concentration in the Tobacco Trades

The micro-economics of this trade are reasonably well-understood and need no reiteration.[79] A point worth discussing, however, is the distribution of the tobacco trade across Scottish ports. Concentration was a phenomenon observable since the earliest times. As early as 1704, Port Glasgow allegedly accounted for 44 per cent of total Scottish tobacco imports. At that time this would have been a mixture of legal imports through England and "illegal" (in terms of English, but not Scottish Navigation Law) direct traffic between the English colonies in North America and Scottish ports. After the Union and until 1711, the Glaswegian ports increased their share in total (legal) tobacco imports into Scotland to 89 per cent. Between 1722 and 1725, this share even increased further to 95 per cent. The second biggest port, Dumfries, handled three per cent. Other ports were irrelevant.[80] In the 1760s and 1770s these relations were similar; Glasgow usually handled 90 per cent and more of

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Cambridge Economic History of Modern Britain, Vol. I. *Industrialisation, 1700-1860* (Cambridge, 2004), pp. 388-416; Id., "The Modern Economy: Scotland and the Act of Union" in Id., Lee & Peden (eds.), *Transformation of Scotland*, pp. 13-33. The main implications and conclusions in Devine, *Tobacco Lords*, regarding the business methods, size and structures in the Glaswegian tobacco trades can also be found in: I. W. Stevenson, "Some Aspects of the Geography of the Clyde Tobacco Trade in the Eighteenth Century," *The Scottish Geographical Magazine*, LXXXIX (1973), pp. 19-35. This work has – presumably by mistake – been omitted from the references in Devine, *Tobacco Lords*.

79 Scholars have named the following causal factors that initiated and fuelled the growth of the Glaswegian tobacco trades in the eighteenth century: (a) A shorter and often more peaceful route from the tobacco colonies (Virginia, Maryland) across the North Atlantic compared to the route to London or other English ports, in combination with (b) an innovative purchasing system in the colonies (forward purchases of tobacco, resident agents in stores run by Glaswegian merchants, store credit system leading to long-term and asymmetrical credit relationships in favour of the Glasgow merchants) considerably reduced the turnover time for capital employed in the trades. (c) The prevalence of monopolistic institutional buyers such as the French tobacco farmers, who had resident purchasing agents in Edinburgh and Glasgow and regularly made bulk purchases, led to comparatively stable markets and sales levels both in Glasgow, as well as continental Europe. (d) The development of an innovative financial infrastructure and (e) lower operational costs in Glasgow or Scotland due to an under-developed economy (wages, circulating capital such as ships, sails and other equipment) generally gave Scottish traders a competitive edge vis-à-vis English ports and thus increased profit opportunities. See works referred to in the previous note.

80 TNA, 36/13, *General Abstract of Tobacco Imported into Scottish Ports between May 1722 and Midsummer 1725.*

Scotland's tobacco trades.[81] Accordingly the leading historian of the trades has suggested that

> [a]lthough in earlier years other Scottish towns, such as Ayr, Dumfries, Bo'ness, Leith, Dundee and Aberdeen, were actively importing tobacco, the Glasgow merchants, through their two outports of Greenock and Port Glasgow, increasingly established a virtual stranglehold on the trade. As early as the 1710s the Clyde's share of Scottish imports was already around 90 per cent and by the 1760s had climbed further again to 98 per cent. Glasgow was Scotland as far as the tobacco trade was concerned.[82]

This assessment, however, is not entirely correct, as it overlooks an interesting and significant pattern and thus misses out on five crucial decades in Scotland's commercial history, i.e. in-between 1710 and 1760. Research carried out by the present author shows that the trend towards concentration in Scotland's tobacco trades *reversed* considerably between the 1720s and 1760s. During the three central decades of the eighteenth century (c.1725-1755), Glasgow's share in total imports of tobacco into Scotland declined from levels around 90 per cent down to levels of 60 per cent. Since the later 1720s the Glaswegian outports lost at least some share of the tobacco business to other ports, both in the east and the west, but most notably to Dumfries, Kirkcudbright, Dunbar and Leith.

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81 Price, "Glasgow, the Tobacco Trade, and the Scottish Customs," p. 8.
82 T. M. Devine, *Scotland's Empire, 1600-1815* (London, prepublication copy, 2003), p. 70f.

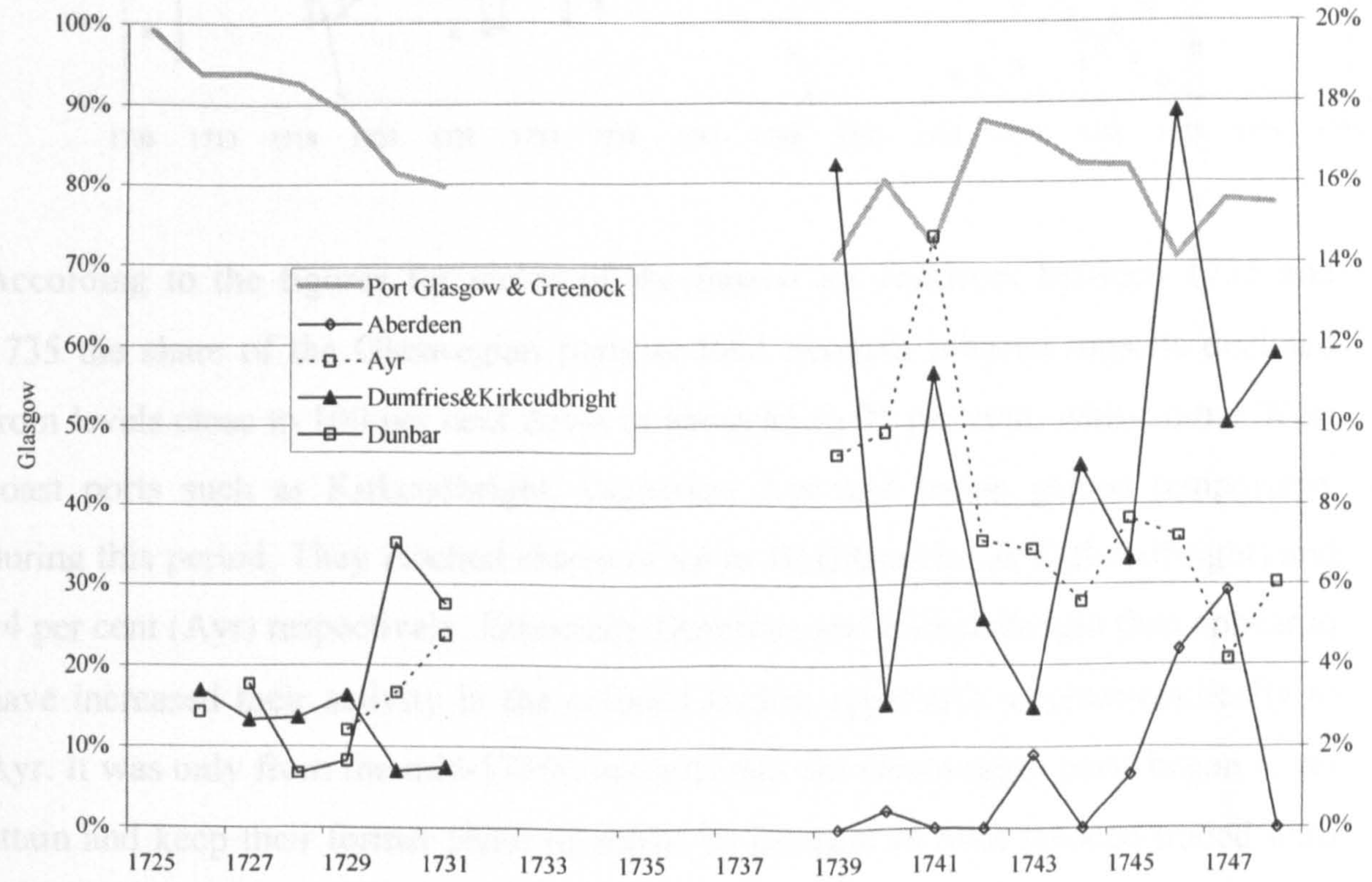
Table 5: Scottish Ports Importing Tobacco, 1725-1731

1725-1731: TNA; T36/13, Pt. 2; 1739-1748: NAS RH2/5/11

	Ayr	Campbel town	Dumfries &Kirk- cudbright	Dunbar	Fort William	Dundee	Inver- ness	Irvine	Leith	Mon- trose	Port Glasgow &
1725		1%									99%
1726	3%		3%								94%
1727			3%	4%							94%
1728			3%	1%			1%	1%		1%	93%
1729	2%		3%	2%			2%		2%		89%
1730	3%		1%	7%		4%	2%			1%	81%
1731	5%		2%	6%		4%			4%		80%
1739	9%		16%	3%			1%				71%
1740	10%		3%	2%			2%			2%	80%
1741	15%		11%							2%	72%
1742	7%		5%								88%
1743	7%		3%							2%	86%
1744	6%	0.03%	9%			1%				0%	82%
1745	8%		7%						1%	1%	82%
1746	7%		18%								71%
1747	4%		10%							2%	78%
1748	6%		12%			1%				4%	77%

Figure 7: Imports of Tobacco into Scottish Ports, 1721-1748 (lbs)

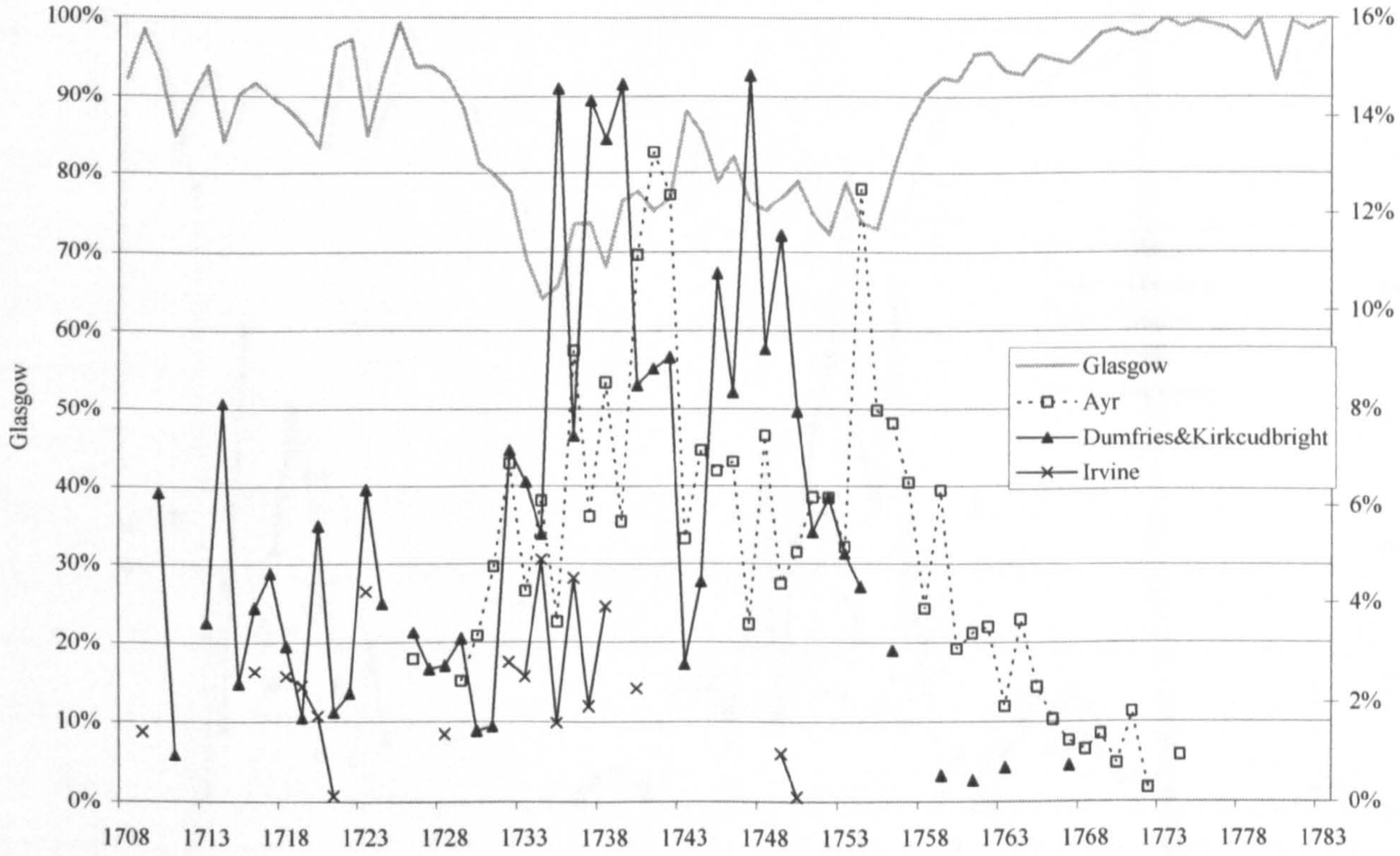
1721-31: TNA; T36/13, Pt. 2; 1739-48: NAS, RH2/5/11/31-2.



As the above series for tobacco imports (derived from the now lost port books) is incomplete, the yield figures of the *Impost on Tobacco* may be used as a proxy for the distribution of the factual import trades in volumetric terms.

Figure 8: Tobacco Imports through the Western Ports, 1708-1783

Approximated by the figures for total yields of *Impost on Tobacco*, NAS, E501/1-76



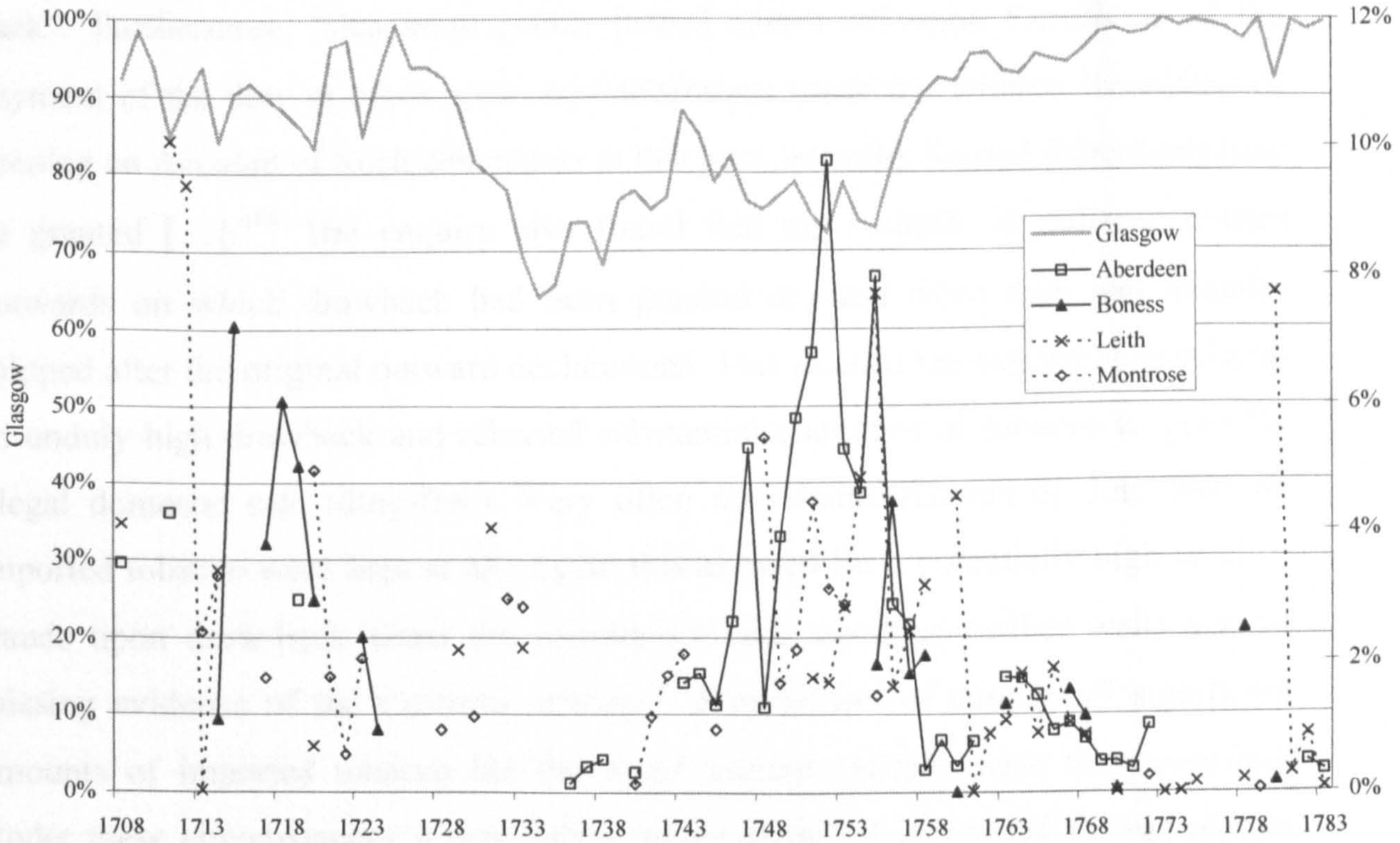
According to the figures for yields of the *Impost on Tobacco*, between 1725 and 1735 the share of the Glaswegian ports in total Scottish tobacco imports declined from levels close to 100 per cent down to about 65 to 75 per cent, whilst other West coast ports such as Kirkcudbright, Dumfries, Ayr and Irvine gained temporarily during this period. They reached shares of up to 10 (Dumfries & Kirkcudbright) and 14 per cent (Ayr) respectively. Especially Dumfries and Kirkcudbright thus appear to have increased their activity in the colonial trades, apparently counter-cyclically to Ayr. It was only from the mid-1750s onwards that the Glaswegian ports began to re-attain and keep their former share of above 90 per cent in total tobacco traded until the War of Independence.

The *East coast* ports took part in this development, too, but at a somewhat lesser scale than the Western ports. The most significant period of activity appears to

have been roughly those years between 1738 and 1758, i.e. the first two decades of Scotland's tobacco cycle. Obviously this process was slightly lagged compared to the take-over process in the South-west.

Figure 9: Tobacco Imports through the East Coast Ports, 1708-1783

NAS, E501/1-76



Therefore, notwithstanding all possible biases of customs yields figures expressed in terms of ports' shares, the degree of regional concentration in the tobacco trades declined significantly during 1725-1755. This allowed other ports to enter what was to become a most profitable business, in fact Scotland's commercial success story in the pre-industrial period. Explanations for this remarkable pattern are potentially manifold and will not be developed in a systematic or comprehensive approach, as this would exceed the purpose of the present work. Suffice it to cite but two possible factors which might have influenced a decrease in regional concentration at the expense of the Glaswegian entrepôt.

First, as has been noted above, it was Dumfries in particular, which increased its share at the expense of Glasgow after 1725. The *Dumfries* Customs administration,

which at the time also included the port of Kirkcudbright[83], was notorious for its ineffectiveness in the 1720s, as far as the Board of Customs was concerned. For the smuggler on the other hand it was a paradise. It was reported to the Treasury in 1732 for instance that frequently no affidavits were taken for "Entry's outwards for Tobacco & other foreign goods upon debenture [...] thereon that Such goods paid or Secured the duties as therein Exprest or That the Same had not before been drawn back". Furthermore, "debenture goods [*were*] Ship't off upon Certificate of the payment of the duty at other ports, and debentures made out without Recording or keeping an Account of Such debentures at this port, whereby Second debentures may be granted [...]."[84] The enquiry also found that the majority of tobacco entries outwards on which drawback had been granted covered more than was actually shipped after the original outward declarations. This granted the exporting merchants an unduly high drawback and released substantial quantities of tobacco cargoes for illegal domestic sale (duty-free). Very often no reliable records of duty paid on imported tobacco were kept at all. Again this allowed for a potentially high level of frauds upon draw-back when the merchant's oath stood up (rather well) against missing evidence of the Customs officers.[85] Possibilities of cutting off significant amounts of imported tobacco for the home market tax-free were thus manifold. Under these circumstances it was only a minor aspect of an overall marred picture that the commander of the Dumfries customhouse boats was being "complain'd of for habitual drunkenness."[86] *Kirkcudbright* suffered from similarly fraught customs procedures, such as the missing of statements upon oaths and proper documentation of duties paid on imported tobacco. This likewise paved the way for ample frauds upon re-exportation at this port.[87] These temporary weaknesses in the Dumfries customs precinct – whose personnel after all had to cope with a wide precinct of rugged coastline which at that time had already acquired a notorious reputation for being a smuggler's haven, not only for tobacco, but brandy and tea as well – would

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83 But separate customs accounts were kept for both after 1742. NAS, E504/9 (Dumfries), E504/21 (Kirkcudbright).
84 TNA, T36/13, *Observations Upon Examining the Books and Papers at the Following Ports* (1732), remarks relating to Dumfries.
85 Ibid.
86 Ibid.
87 Ibid., remarks relating to Kirkcudbright.

have provided a strong incentive for Glaswegian merchants to re-route parts of Scotland's tobacco trades through the South-west in the 1720s.[88]

The increase in *Montrose's* tobacco trade 1748-1755 on the other hand can be largely attributed to one co-partnership or firm, Thomas Douglas & Co, who were active chiefly during 1751-53. They were the main tobacco importers at Montrose and will be examined in more detail in chapter 8 below. Thomas Douglas commenced business in about 1740 on his own account, but later on after c.1750, in co-partnership with Robert Dunbar, Robert Dickie & John Addison, became the largest and at times sole importer and re-exporter of tobacco in Montrose. Initially, Douglas seems to have imported his tobacco from Glasgow, to be transported overland to Montrose for re-exportation. But later on, when his co-partnership was established, the firm began to import their tobacco directly through Montrose.[89] This might in fact have been one of the reasons for their downfall. Potentially, a location at the East coast such as Montrose was far less suited for the Atlantic trades than Glasgow or other south-western ports of Scotland. Both the duration, as well as the risk of a trans-Atlantic voyage, to which a trip around the North tip of Scotland and the notorious Cape Wrath had to be added, increased. This would have decreased the commercial advantage of a tobacco trader resident in Montrose vis-à-vis his fellow countrymen in Glasgow. In fact Douglas & Co went bankrupt in 1754 due to a default on Customs duties only three years after the co-partnership had been formed.[90] This might be an indication that the foundations for a successful trans-Atlantic business routed via Montrose were decidedly thin in the mid-1750s still. Accordingly, with the default of the company, the share of Montrose in the total Scottish tobacco trades declined again to insignificant levels.

From the 1760s onwards, the Glaswegian ports thus re-established their former supremacy which they would retain until the War of Independence. This, however, is not to say that the trade *handled by Glaswegian merchants* would necessarily have declined to the same degree. In 1754 and 1755 for instance tobacco lords resident in

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88 From which, as the enquiry found, tobacco was also sent in considerable quantities to England. T36/13, letter by Vaughn to Treasury, 18 December 1732.

89 NAS, E504/24/2-3.

90 The duration of this co-partnership can only be guessed from the Montrose customs accounts which begin to record imports and exports on this firm's account in 1751. The co-partnership went bankrupt in 1754. See detailed examination in chapter 8, section 8.3.

Glasgow frequently dispatched outward-bound cargoes to the Americas from lesser Western ports, such as Irvine and Ayr. This suggests that they might have landed part of their tobacco supply at these ports as well, rather than ordering the tobacco ships directly up to Greenock or Port Glasgow. Thus the rise of the south-western ports 1725-1755 could have been based on activity by Glaswegian merchants.

The interesting overall conclusion to this section is that the eighteenth-century tobacco business was by no means or *per definitionem* limited to the West and its oft-cited geographical and commercial advantages. Nor was trade always concentrated on Port Glasgow and Greenock. As the above evidence shows, there was (at least temporarily) ample scope for competition from other regions in Scotland as well. Secondly, and perhaps even more importantly, it needs to be borne in mind that this competition appears to have been limited in terms of time (mainly 1735-1755) and scope. Thomas Douglas & Co for instance, the Montrose partnership active in the colonial and slave trades between c. 1750 and 1754, went bankrupt on liabilities to the Customs, which to some Glaswegian tobacco lords at the same time would only have represented "peanuts", to use modern commercial phraseology. There was at any time during the century much more capital circulating and available for the American trades in Glasgow than anywhere else across Scotland. This accounted for sounder and longer-lasting business foundations in the West, which would outlive any temporary disturbances or attempts of other Scottish locations to enter an extremely lucrative, yet also very risky and highly capital-intensive warehousing business.

Obviously there is still ample scope for further research into the Scottish tobacco trades, especially between 1725 and 1755. Whilst not much can be said about *markets* for colonial tobacco re-exported from Scotland in the period under consideration, some evidence on colonial goods sent from Scotland to Baltic ports can be drawn from the Elsinore toll, which most ships entering the Baltic had to pass.

4.3.2.1.3 Re-exports of Colonial Goods to the Baltic According to the Sound Toll Registers

The Sound Toll Registers are as valuable as they are deceptive.[91] They seem to be especially unreliable in terms of the flags flown by ships – the latter were not always or by necessity contingent upon the actual nationality of merchants and crews involved, but frequently were adjusted to the commercially motivated political opportunism of the day.[92] The number of ships passing the Sound and declared in the Sound Toll Registers as "Scottish" therefore ought to be seen as a lower-bound estimate of the factual totals of ships handling Scottish trade (or trade on Scottish account). Notwithstanding these difficulties, an interesting pattern relating to Baltic trade on Scottish account between 1660 and 1760 obtains.

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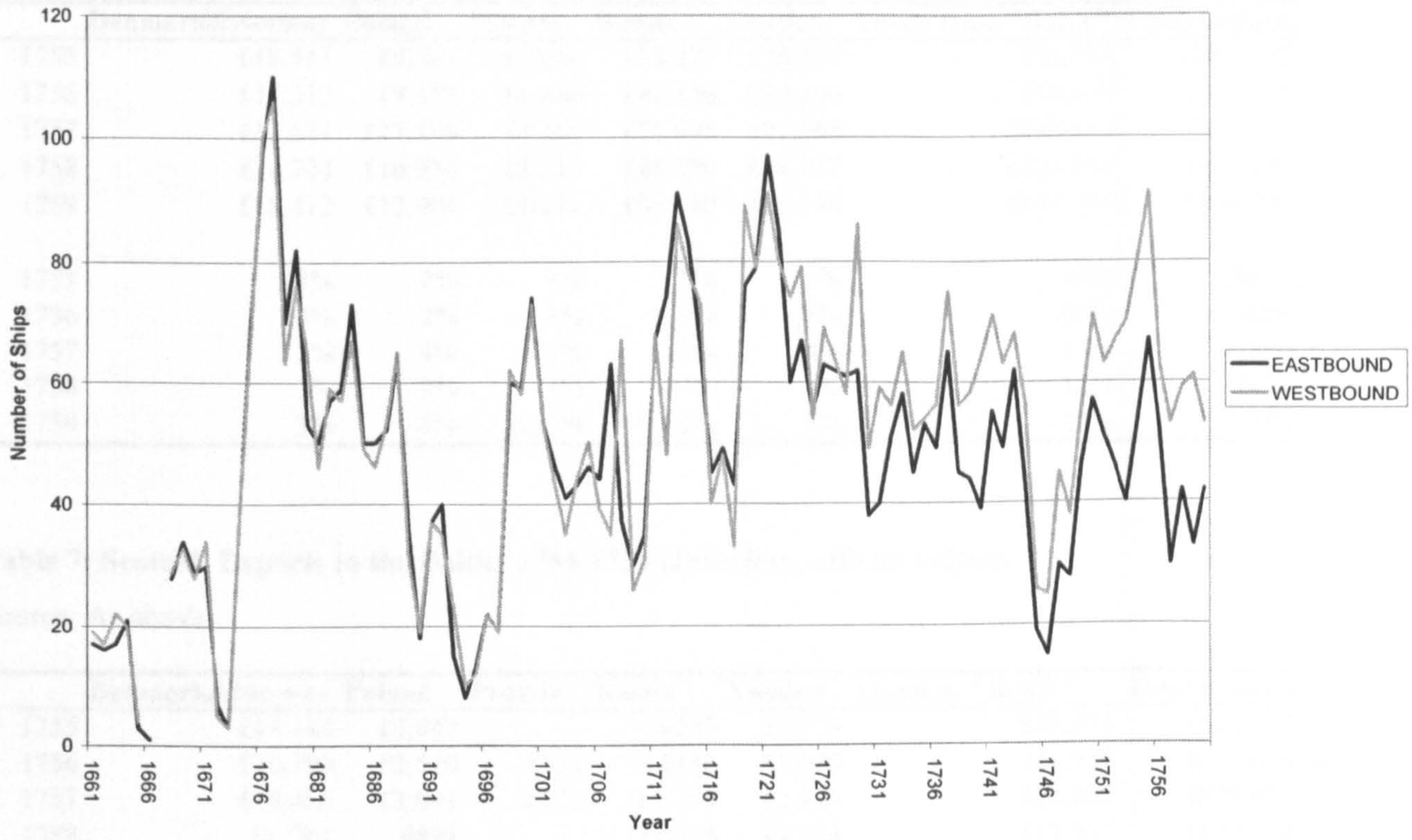
91 W. S. Unger, "Trade Through the Sound in the Seventeenth and Eighteenth Centuries," *EcHR*, Second Series, XII, 2 (1959), pp. 206-221; J. A. Faber, "Structural Changes in the European Economy During the Eighteenth Century as Reflected in the Baltic Trade" in W. G. Heeres, L. M. J. B. Hesp, L. Noordegraaf and R. C. W. Van der Voort (eds.), *From Dunkirk to Danzig. Shipping and Trade in the North Sea and the Baltic, 1350-1850* (Amsterdam, 1988), pp. 83-94.

92 There were for instance a substantial number of Scots residents in Stockholm and Gothenburg in the later decades of the seventeenth century, carrying out a regular and wide-spread multilateral trade all across north-western Europe, mostly under the Swedish flag. I am indebted to Dr Steve Murdoch, University of St Andrews, for bringing this to my attention. S. Murdoch, *Network North: Scottish Kin, Commercial and Covert Associations in Northern Europe 1603 – 1746* (Leiden - Boston, 2006), ch. 4.

Figure 10: Scottish Ships Passing through the Øre Sound, 1661-1760
N. E. Bang and K. Korst (eds.), *Tabeller over Skibsfart og Varetransport gennem Øresund 1661-1783 og gennem Storebælt 1701-1748*, Vol. 1.1 (Copenhagen - Leipzig 1939), Vol. 1.2 (Copenhagen - Leipzig 1945).



There was a marked decline in the traffic of Scottish ships to and fro between 1676 and 1696. Thereafter, trade levels recovered, but the peak level of 1676 would not be reached again ever (at least not prior to the 1760s). The effect of "King William's Lean Years" is also clearly visible, first from a depression in shipping with a low in 1694. Thereafter, a rapid increase (1694-1700) might, as well as suggesting an economic recovery, be indicative of rising grain imports from the Baltic. At the time of Union, trade with the Baltic was again in a considerable depression. A further notable and protracted decline is visible from c. 1721-1746. Statistics from the end of the period under consideration suggest that whilst not an inconsiderable trading partner in terms of imports (such as timber and naval stores), Baltic ports only accounted for a minuscule share of total Scottish exports in the eighteenth century.

Table 6: Scottish Imports from the Baltic, 1755-1759 (£Sterling, official values)

Source: TNA, Customs 14, official values. As not all Danish-Norwegian ports were located in the Baltic the figures given below are upper-bound estimates of traffic to and from the Baltic.

	Denmark&Norway	Poland	Prussia	Russia	Sweden	Totals from "Baltic"	Total Imports
1755	£18,583	£9,369	£3,040	£38,273	£24,509	£93,774	£465,402
1756	£17,312	£9,359	£6,436	£42,306	£20,196	£95,609	£478,975
1757	£12,601	£27,388	£3,261	£79,895	£23,068	£146,213	£621,513
1758	£16,724	£10,954	£5,210	£48,790	£18,727	£100,404	£665,250
1759	£18,412	£12,008	£2,221	£90,130	£22,130	£144,901	£608,575
1755	4%	2%	1%	8%	5%	20%	100%
1756	4%	2%	1%	9%	4%	20%	100%
1757	2%	4%	1%	13%	4%	24%	100%
1758	3%	2%	1%	7%	3%	15%	100%
1759	3%	2%	0.37%	15%	4%	24%	100%

Table 7: Scottish Exports to the Baltic, 1755-1759 (£Sterling, official values)

Source: As above.

	Denmark&Norway	Poland	Prussia	Russia	Sweden	Totals to "Baltic"	Total Exports
1755	£17,440	£3,042		£213	£7,779	£28,474	£535,567
1756	£10,790	£2,510	£754	£186	£8,689	£22,929	£626,056
1757	£19,466	£2,091	£138	£1,214	£2,173	£25,082	£828,675
1758	£6,701	£898		£1,274	£4,104	£12,977	£839,331
1759	£12,969	£1,057	£198	£235	£1,166	£15,625	£940,805
1755	3.26%	0.57%		0.04%	1.45%	5.32%	100%
1756	1.72%	0.40%	0.12%	0.03%	1.39%	3.66%	100%
1757	2.35%	0.25%	0.02%	0.15%	0.26%	3.03%	100%
1758	0.80%	0.11%		0.15%	0.49%	1.55%	100%
1759	1.38%	0.11%	0.02%	0.02%	0.12%	1.66%	100%

Table 8: Scotland's "Trade Deficit" with the Baltic, 1755-1759 (£Sterling, official values)

Source: As above.

	Denmark&Norway	Poland	Prussia	Russia	Sweden	Export Surplus (+) / Deficit (-)
1755	-£1,143	-£6,328	-£3,040	-£38,060	-£16,730	-£65,301
1756	-£6,522	-£6,849	-£5,682	-£42,120	-£11,507	-£72,680
1757	£6,865	-£25,297	-£3,123	-£78,681	-£20,895	-£121,131
1758	-£10,023	-£10,056	-£5,210	-£47,516	-£14,623	-£87,427
1759	-£5,443	-£10,951	-£2,023	-£89,895	-£20,964	-£129,276

Whilst Scotland in 1755-1760 sent on average 3.05 per cent of her total exports (incl. re-exports) to the countries given above, she received 20 per cent of her imports from that area on average, leading to a considerable trade deficit (notwithstanding all

biases of the official 1755 valuations applied in the contemporary trade statistics).[93] Given the current knowledge on the structure of Anglo-Baltic trade, it seems unlikely that Scotland's trade balance with the Baltic would have been positive during most years in-between, i.e. 1707-1755.

Partly this was a result of the fact that the Baltic (approximated by the labels "Poland", "Russia"[94] and "Sweden") was no great consumer of *colonial goods* traded on Scottish account.

Table 9: Re-exports of Tobacco and Total Re-Exports from Scotland, 1755-59
TNA, Customs 14. Values recalculated to a volumetric standard. All values averaged for 1755-59

	Tobacco		Total Re-exports	
	£Sterling	%	£Sterling	%
Low Countries	837,085.10	52.35%	876,233.70	42.93%
France	432,023.10	27.02%	432,023.10	21.17%
Ireland	147,753.20	9.24%	261,121.70	12.79%
Germany	136,027.70	8.51%	170,179.50	8.34%
Denmark&Norway	39,991.31	2.50%	41,405.40	2.03%
Poland	33.83	0.00%	353.84	0.02%
Russia			534.03	0.03%
Sweden	1,001.75	0.06%	2,525.58	0.12%
Other	5,085.32	0.32%	256,467.70	12.57%
	1,599,001	100.00%	2,040,845	100.00%

Only 0.06 per cent of tobacco re-exports and 0.17 per cent of total re-exports from Scotland went to the Baltic in 1755-59. Including the whole of "Denmark&Norway", thus adding a generous upward bias (as not all Danish ports were located in the Baltic), the figures still work out at 2.57 per cent for tobacco and 2.2 per cent for total re-exports from Scotland respectively.

There were, however, isolated times in the 1730s, 1740s and early 1750s, when according to the Sound Toll Registers, exports of "colonial goods" from Scotland into the Baltic surged, possibly also in terms of total re-exports from Scotland, as the following figure shows.

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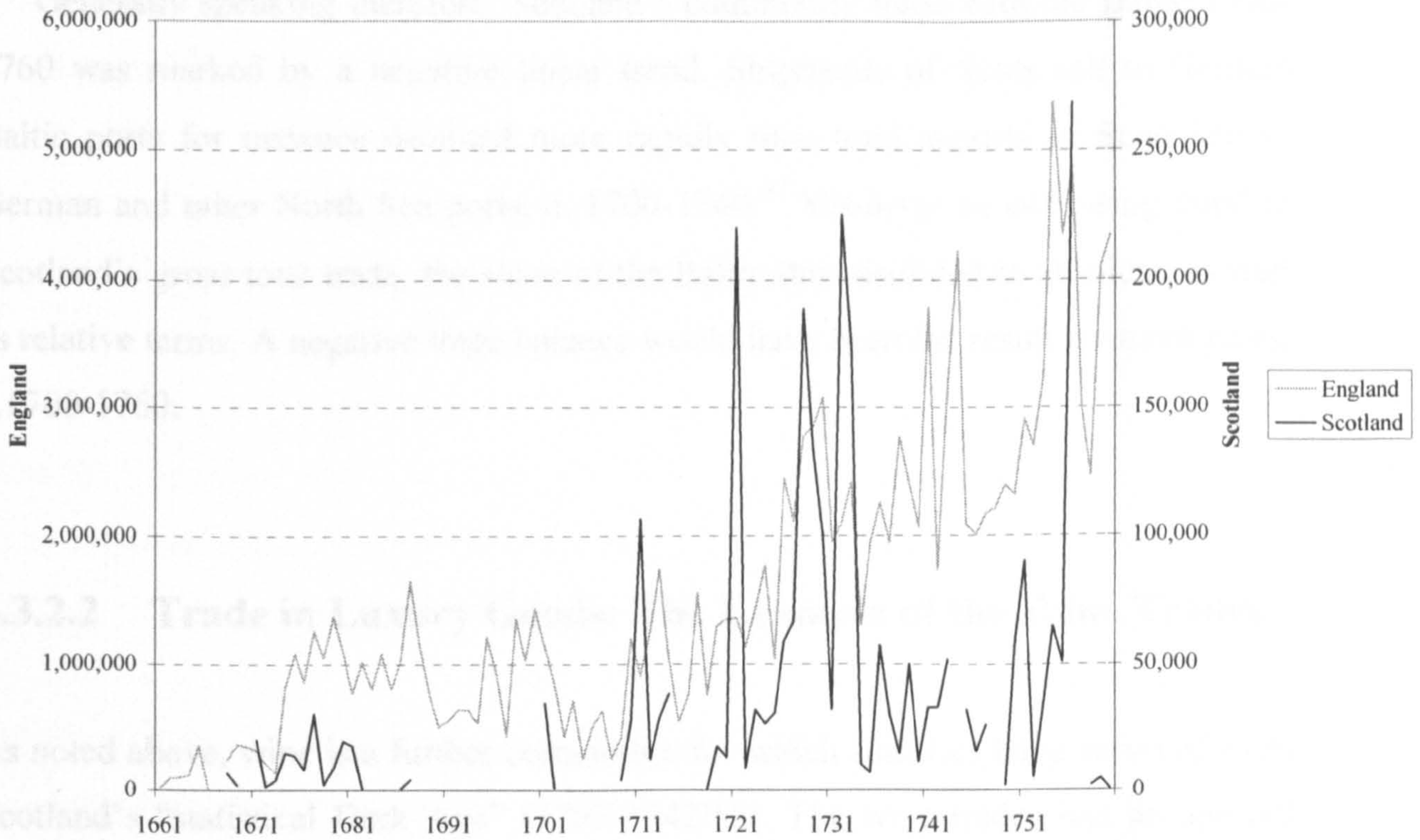
93 See ch. 3, section 3.2.5.
94 Including Livonia.

Figure 11: Scottish and English Re-exports of "Colonial Goods" (*Kolonialvaren*) Eastwards Through the Øresund, 1661-1760

Bang & Korst (eds.), *Tabeller.*



These shipments, however, appear to have been rather erratic, but obviously counter-cyclical to English shipments; they thus seem to have happened partly at the expense of English re-exports to that area. Compared to the average levels for England's re-exports to that region, however, they were too small to make a difference (note that the relation of the scales used in the above graph works out at 20:1).

The main markets for colonial re-exports via Scotland lay across the North Sea littoral (France, Low Countries and Germany), as well as Ireland[95] in general. Presumably a considerable share of Scotland's trade deficit with Baltic ports would be settled by profits in the re-export trades in tobacco, sugar, coffee and rice with the western European markets such as France, Amsterdam, Rotterdam and, to a lesser extent, Hamburg and Bremen. After 1700, bills rather than cash were used to an increasing degree, in order to transfer surpluses from the larger financial centres in

95 Irish ports were excluded from trade in enumerated commodities by the English Navigation Acts.

the West (London, Amsterdam, Hamburg) to the deficit areas in the Baltic (Danzig, Königsberg, Riga and Narva).[96]

Generally speaking therefore, Scotland's commodity trade with the Baltic 1700-1760 was marked by a negative linear trend. Shipments of Scots salt to German Baltic ports for instance declined more rapidly than total exports of Scots salt to German and other North Sea ports, c. 1700-1760.[97] Vis-à-vis an increasing trend in Scotland's gross total trade, the share of the Baltic thus declined in absolute, as well as relative terms. A negative trade balance would have been the result for most years, c.1700-1760.

4.3.2.2 Trade in Luxury Goods: The Example of the Wine Trades

As noted above, wine is a further commodity for which statistics have survived from Scotland's "statistical Dark Age" (1707-1742/55). The wine trades had an age-old tradition in 1707 and were part of Scotland's continental link. Traffic in Spanish and Madeira wine, however, after 1707 became increasingly integrated into the triangular patterns of the Atlantic economy, connecting Scotland with the Iberian Peninsula, Madeira and the Canaries, the Caribbean and North America.

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96 J. Newman, "'A Very Delicate Experiment'. British Mercantile Strategies for Financing Trade in Russia, 1680-1780" in I. Blanchard, A. Goodman and J. Newman (eds.), *Industry and Finance in Early Modern History* (Stuttgart, 1992), pp. 116-142, esp. pp. 127-132; M. A. Denzel, *'La Practica della Cambiatura'. Europäischer Zahlungsverkehr vom 14. bis zum 17. Jahrhundert* (Stuttgart, 1994); J. Sperling, "The International Payments Mechanism in the Seventeenth and Eighteenth Centuries," *EcHR*, Second Series, XIV (1961-2), pp. 446-68; C. Wilson, "Trade and Trade Balances: The Mercantilist Problem," *EcHR*, Second Series, II (1949), pp. 152-161, in particular p. 157f., p. 160; E. Heckscher, "Multilateralism, Baltic Trade and the Mercantilists," *EcHR*, Second Series, III (1950), pp. 219-228, esp. p. 221f., p. 225; C. Wilson, "Treasure and Trade Balances: Further Evidence," *EcHR*, Second Series, IV (1951), pp. 231-242, in particular p. 233f.; J. M. Price, "Multilateralism and/or Bilateralism: The Settlement of British Trade Balances with 'The North', c. 1700," *EcHR*, Second Series, XIV, 2 (1961), pp. 254-274, esp. pp. 259-264, p. 267, pp. 271-3. S. E. Åström, *From Cloth to Iron. The Anglo-Baltic Trade in the Late Seventeenth Century*, Pt. I. *The Growth, Structure and Organization of the Trade* (Helsingfors, 1963), esp. pp. 91-122. J. Schneider and O. Schwarzer, "International Rates of Exchange: Structures and Trends of Payments Mechanism in Europe, 17th to 19th Century" in W. Fischer, R. Marvin McInnis and J. Schneider (eds.), *The Emergence of a World Economy 1500-1914*, Pt. I. *1500-1850* (Wiesbaden, 1986), pp. 143-170, esp. p. 150f.

97 P. R. Roessner, "'New Light on Whatley's Numbers'. The German Market for Scots Salt in the Eighteenth Century," *SHR* (forthcoming).

Throughout the period Scotland regularly imported foreign, mainly French, Portuguese and Spanish wines, accounting for up to four per cent of total Scottish imports.[98] In terms of items traded, *Spanish* wine had initially been by far the most popular wine imported during the early decades (89 per cent of total wine imports on average between 1711 and 1731, followed by Portugal wine at 6 per cent).[99] This changed: in 1755-1776, *Portugal* wine was favoured by Scots traders over Spanish wine, the former accounting for on average 57 per cent of total wine imports, as opposed to 24 per cent for Spanish wine.[100] Neither was by necessity imported directly from the Iberian Peninsula, but frequently made up part of return cargoes from the Caribbean and North America. The same applied to *Madeira* which was often imported from the Americas in ships that had commenced on "triangular" voyages leading via Southern Europe. Such voyages frequently comprised destinations in Africa, the Canaries or Madeira and one or more of the Caribbean islands prior to their return link to Scotland. Another popular source of continental wines was Guernsey (see below).

Official trade statistics do not accurately reflect the true quantities and qualities shipped. Especially French wine, usually more expensive than the Iberian types, as it was subject to higher duties, was frequently smuggled, or a deliberately false declaration as to the type of wine would be made. A considerable amount of French wine was for instance shipped from Guernsey to Scotland, but declared as Spanish or Portuguese wine during the period 1755-1800.[101] During the eighteenth century the Channel Islands were a thriving entrepôt, providing Britain with cheap French goods that were either prohibited or otherwise paid a high nominal duty upon regular entry into a port on the British mainland. Other than wine, such goods imported to Scotland normally included apples, capers, prunes and nuts, chiefly luxury goods destined for the tables of the upper middle classes. Wine, however, clearly was the most significant item within this class of commodities.

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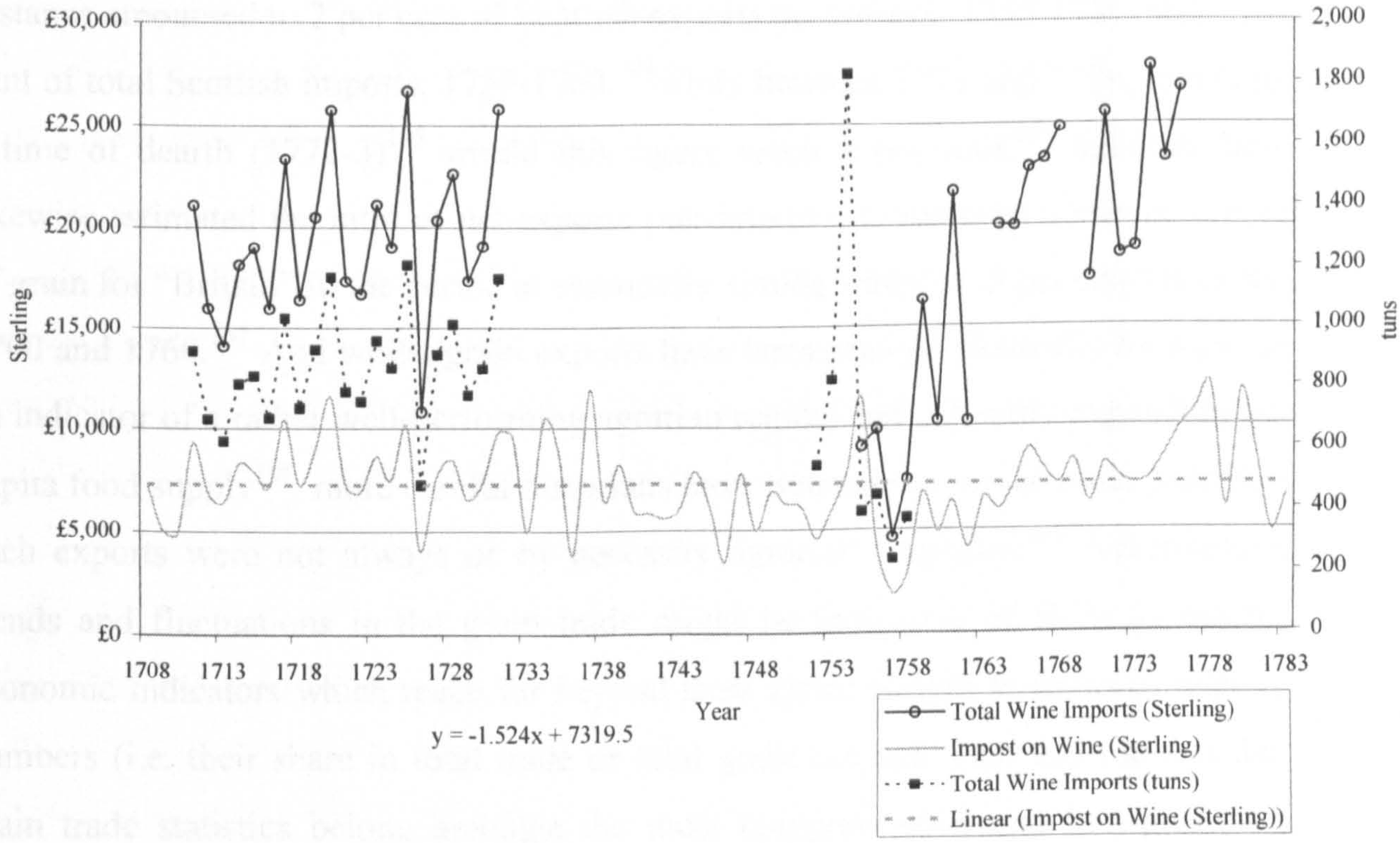
98 Appendices B 1-2, 7.
99 Calculated from TNA, T36/13/3; figures valued at 1755 valuations in TNA, Customs 14.
100 TNA, Customs 14.
101 Xerocopies communicated via letter by Dr G Stevens Cox, Guernsey, 19 May 2006. I am indebted to Mr Cox for bringing this point to my attention.

The interesting aspect that emerges from the fragmentary statistics between 1710 and 1776 is the unambiguous decline in the trend and average figures for retained wine imports between 1711/31 and 1755/76. Overall (1707-1783) the trend, approximated by the yield figures for the *Impost on Wine*, remained a literally horizontal one.[102]

Figure 12: Total Imports of Wine into Scotland, 1710-1776 (£Sterling)
Source: as table above. Impost on Wine: General Accounts of the Customs (Scotland). NAS, E501/1-76.



With Scottish population levels increasing, all uncertainties of the source material apart, Scottish per capita consumption levels of wine declined between 1710/30 and 1755/76. The possible ramifications for a macro-economic framework for Scotland c. 1700-1760 will be discussed below.[103]

The last item in Scotland's trade, for which the Treasury officials ordered accounts from the Edinburgh customhouse on a regular basis prior to the establishment and inauguration of the Scottish inspector general of imports and exports (1755) was grain.

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102 It was actually negative: y= -1.524x + 7319.5.
103 Ch. 6.

4.3.2.3 Grain

4.3.2.3.1 General Remarks

In terms of their share in total exports and imports, grain imports and exports were marginal. Including maize and the re-export crop rice, total imports of "cereal" for instance amounted to 2 per cent of Scottish exports on average, 1755-1759, and 3 per cent of total Scottish imports, 1755-1763.[104] Only between 1771 and 1776, including a time of dearth (1772-3)[105] would this figure reach 5 per cent.[106] Scholars have likewise estimated the ratio of net-exports (net-imports) to net total domestic output of grain for "Britain" in the period at essentially similar ratios (c. 3 per cent) between 1700 and 1760.[107] And whilst grain exports have been seen emphatically by some as an indicator of a rather well-performing agrarian regime and generally expanding per capita food supply[108], more careful historians have pointed out on the other hand that such exports were not always or by necessity agrarian surpluses.[109] Nevertheless, trends and fluctuations in the grain trade might be indicative of shifts in macro-economic indicators which reach far beyond their actual weight in terms of relative numbers (i.e. their share in total trade or total grain output). This and the fact that grain trade statistics belong amongst the most comprehensive and best-preserved statistical evidence relating to Scottish trade prior to 1755, makes a detailed examination necessary.

Grain *imports* into Scotland are a fairly unambiguous story of supply and demand, i.e. contingent upon by harvest failure, localized (mainly urban) shortfalls of production over demand, often followed or accompanied by more pathological

104 TNA, Customs 14.
105 S. G. E. Lythe, "The Tayside Meal Mobs 1772-3," in: *SHR*, XLVI (1967), pp. 26-36.
106 TNA, Customs 14.
107 P. Deane and W. A. Cole, *British Economic Growth 1688-1959. Trends and Structure* (Cambridge, 2nd ed., 1967), p. 65, Tab. 17.
108 Whyte, *Scotland before the Industrial Revolution*, p. 143.
109 D. Ormrod, *English Grain Exports and the Structure of Agrarian Capitalism 1700-1760* (Hull, 1985), p. 53. C. A. Whatley, "The Union of 1707, Integration and the Scottish Burghs: The Case of the 1720 Food Riots," *SHR*, LXXVIII, 2 (October 1999), pp. 193-218, at pp. 200-202.

developments such as starvation, an increase in mortality and popular unrest. Wherever neither situation occurred, grain imports would not take place. Grain *exports* on the other hand, expressed either in absolute terms or as net-exports, represent no clear-cut textbook story of supply and demand. As Ormrod has demonstrated, the level of *English* grain exports 1700-1760 was mainly contingent upon the bounty paid on them. Whenever this bounty fell away, exports would likewise dwindle, quite regardless of general *European conditions* of demand.[110] Without doubt this applies to the Scottish grain trades as well. The amount of grain available for export was furthermore contingent upon rent levels, i.e. the share of the crops that aristocratic landowners, who were the exporters mostly, were able to appropriate legitimately, as well as the relation of rents paid in kind to rents paid in cash.[111]

Nor were grain exports always surplus to requirement. The heyday of *Scottish* exports fell into periods marked by stagnating population levels and rather slowly ascending) cereal prices (1720s, 1730s). This period was characterized by favourable conditions for the consumer and adverse conditions for the agrarian producer, i.e. low Malthusian pressure of supply and demand, if seen in comparison to the post-1740 years. Nevertheless, exports did also take place at times and from areas where significant local shortfalls and an accordingly high price level were recorded.[112] This points to either temporary market failure or a low degree of market integration in general. There is ample evidence that agrarian performance was regionally differentiated across Scotland, without regional disequilibria being always or efficiently relieved by transportation of grain across Scotland from surplus to deficit areas.

These problematic aspects of the grain trade can be highlighted immediately. In 1754, imports and exports of grain, derived from the full set of Scottish customs

110 Ormrod, *English Grain Exports*, ch. IV.

111 If rents or parts of it were fixed in kind (which was the case overwhelmingly during the first half of the eighteenth century), then the amounts available for export from Scotland were quite independent from fluctuations in the harvest cycle, unless a harvest failure led to a general shortfall of rents paid over requirements as stipulated in the leases. R. Dodgshon, *Land and Society in Early Scotland* (Oxford, 1981), p. 247f.

112 Exports of grain, encouraged by the bounty, may in fact have caused an unnecessarily high domestic price level at times. Whatley, "1720 Food Riots"; Ormrod, *English Grain Exports*, p. 58, pp. 83-86.

accounts, exhibit a very characteristic pattern, which was presumably representative for most other years during the century as well.

Table 10: Imports and Exports of Oats and Oatmeal through Scottish Ports, 1754 (quarters)

Source: Complete set of customs accounts, NAS, E504

traffic	port	amt shipped Sum
IMPORT OVERSEAS	AYR	1250.00
	CAMPBELTOWN	1465.50
	DUNDEE	2.55
	GREENOCK	2970.00
	IRVINE	1664.00
	PORT GLASGOW	506.00
	PORTPATRICK	3.00
	STRANRAER	60.00
Subtotal traffic		7921.05
EXPORT OVERSEAS	ABERDEEN	5555.38
	BONESS	2.04
	CAITHNESS	2924.00
	DUNDEE	3.00
	GREENOCK	4.25
	INVERNESS	1680.13
	IRVINE	100.00
	LEITH	5.11
	PORT GLASGOW	1.02
	WIGTOWN	29.75
Subtotal traffic		10304.68
OUTWARD COASTWISE	ABERDEEN	250.00
	BONESS	4.00
Subtotal traffic		254.00

From this, 1754 net-exports of oats and oatmeal obtain at 2,384 quarters, even though significantly higher quantities were either exported (10,305) from ports in the east or imported (7,921) into ports on the west coast. Clearly there were regional disequilibria of supply and demand in Scotland. When in 1738-41 for instance, a harvest crisis wrought havoc to the Scottish business cycle, leading the Scottish lowland economy into a harsh depression during 1739 to 1741, Baillie John Steuart in Inverness observed that

> [t]here is in this Country at present the greatest scarcity of Corn and bread has been for 40 years past [...] but we have fine weather, and a fine appearance of a cropt on the ground, and our Highlands are much better provided in bread this year than the Low Countrys.[113]

Obviously, and assuming that with "Low Countries" Steuart was referring not to the Netherlands but the Scottish Lowlands, the performance of the Scottish agrarian regime was regionally differentiated. It is not at all clear whether such disequilibria were always effectively removed by the domestic market, especially given the fact that until well after 1750 Scotland's road network and transport infrastructure remained poor. As the above table suggests, grain imports centred on the ports in the South-west, drawing their supply from *Ireland*, whilst exports almost exclusively went through east-coast ports located close to the central and northern areas of Lowland Scotland. Therefore, surpluses in the north-east were frequently shipped abroad, fetching a bounty, rather than relieving obvious shortages in the south-west of Scotland.

Viewing the grain trade in an isolated way, i.e. in terms of either exports[114] or imports, is thus bound to overlook the macro-economics behind it. Net-exports[115] are clearly the better bet, taking into account that substantial imports and exports (frequently even of the same cereal) might coincide. With these cautionary aspects in mind, the secular fluctuations in the Scottish grain trades can then be captured from Alexander Bald's tables on Scotland's grain imports and exports.

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113 W. Mackay (ed.), *The Letter-Book of Bailie John Steuart of Inverness 1715-1752* (Edinburgh, 1915), p. 421f. (letter fragment dated 1739 or 1740).

114 As for instance in Ormrod, *English Grain Exports.*

115 Exports minus imports of grain, excluding rice (of which 100 per cent of imports were usually re-exported) and hulled barley, which was sometimes classified as a drug.

4.3.2.3.2 Trends and Cycles in the Grain Trade

4.3.2.3.2.1 A Note on the Sources

Bald's series cover barley, barley meal, bere, buckwheat, maize, malt, oats, oatmeal, peas & beans (aggregated), meal of peas, rye, wheat and wheat meal. The series is broken down year by year and the particular types of cereal concerned, but unfortunately it yields no evidence as to the destination for Scottish grain or the place of origin for imports.[116] The same applies to the current value of the items traded, which unfortunately cannot be asserted, either.[117] In the following, net-exports will therefore be expressed in volume (aggregated by quarters at 4 *cwt* per quarter) and volumetric (£Sterling) terms. The amounts have been valued at the 1755 valuation for each separate grain employed in the inspector general's ledgers of imports and exports. This multiplier has been kept constant for the entire series.[118]

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116 A. Bald, *The Farmer and Corn-Dealer's Assistant* (Edinburgh, 1780), pp. 437-442.

117 Whilst domestic exports expressed in quarters might in theory be valued using a price index for domestic grain derived from existing Scottish price series, it would be impossible to accurately capture prices for imported grain in a yearly series. A. J. S. Gibson and T. C. Smout, *Prices, Food and Wages in Scotland 1550-1780* (Cambridge, 1995).

118 This requires the somewhat stark assumption that neither relative nor absolute (inflation or deflation) prices changed throughout the period. Grain prices appear in fact to have been subject to a higher volatility on average than prices for any other consumable. Furthermore it seems reasonable to assume that at times when actual output diverged from its "natural" level (inflation or deflation), prices for certain cereals (oats) would have oscillated more than others (wheat), as several substitution processes would have taken place.

Table 11: 1755 valuations (£Sterling per quarter) as of TNA, Customs 14 [119]

Commodity	Imported	Exported
Barley	0.8	0.7
Barley meal	0.65	0.7*
Bere	-	0.75
Buckwheat	1	1*
Maize	0.8	0,8*
Malt	-	1
Oats	0.85	1*
Oatmeal	0.85	1
Pease	0.7	0.7*
Rye	0.8	0.8
Wheat	1.5	1.35
Wheat meal	1.325	1.325

Whilst Bald's series has received a fair share of criticism[120], it can be demonstrated that it captures the long-term trends and fluctuations in Scotland's grain trades rather well, if not accurately. The necessary modifications relate to chiefly three aspects. (1) Prior to about 1740 imports of grain from Ireland are left out.[121] For the present discussion this is uncritical as the official figures tend to over-state grain net-exports prior to 1740, but still yield a very significant long-run negative trend, which would obviously be even more pronounced, if Irish imports were added.[122] (2) Bald also omitted the traffic in *hops* and *rice*. This is uncritical, if evidence relating to the rice trades in the 1750s and early 1760s can be taken as representative in the long run.[123] Whilst hops was not normally traded, rice, traded in considerably large quantities at times, was almost exclusively a transit cargo, as the following table shows.

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119 Figures marked with an asterisk have not been found in the source as such, but implied from either import (if not exported in 1755) or export (if not imported in 1755) valuations given in TNA, Customs 14 (as the import and export valuations employed in this sources were largely identical, see ch. 3 above). Meal has been valued at the same rate for the quarter as the corresponding non-milled item (thus barley=barley meal; oat=oatmeal etc). Figures marked with a dash relate to series not covered in Bald.

120 L. E. Cochran, *Scottish Trade with Ireland in the Eighteenth Century* (Edinburgh, 1985), p. 94, p. 96, pp. 102-105.

121 Ibid.

122 TNA, Customs 15, *Inspector General's Ledgers of Imports and Exports*, Ireland. After 1755, when a comparison of Bald's figures with TNA, Customs 14 becomes possible, Bald's figures are literally identical to those contained in the latter. If anything, they therefore tend to *overestimate* Scottish net-exports before the 1740s. This adds a corrective upwards bias to the source, increasing the statistical significance of the observable strong *negative* trend in net-exports in the long run, the macro-economic ramifications of which will be discussed below.

123 P. R. Roessner, *Scottish Trade with German Ports 1700-1770. A Study in Early Modern Multilateralism* (Stuttgart, forthcoming).

Table 12: Total Imports and Re-exports of Rice, Scotland, 1755-1762
TNA, T36/13

	Imports	Re-exports	Re-X/M
	cwt	cwt	
1755	8,704	8,556	98%
1756	17,213	19,612	114%
1757	17,486	16,523	94%
1758	38,912	33,634	86%
1759	52,035	53,494	103%
1760	33,003	32,840	100%
1761	32,526	28,399	87%
1762	25,938	22,625	87%
AVE			96%

Only infinitesimally small quantities were retained for domestic consumption. By far the major share of imported rice would be re-exported to Dutch and German (Bremen, Hamburg), and, to a lesser extent, Irish destinations.[124] (3) Some grain would also be imported from or exported to England, but not recorded in any statistics.[125]

4.3.2.3.2.2 The General Trend

Net-exports of cereals oscillated heavily, but until the 1740s were mostly positive. The harvest crisis of 1724-5, when they approached zero, was an exception. Such was 1741, when net-exports reached a significantly high negative value for the first time. After 1739/41, net-exports of grain regularly reached below zero, and after c.1760 a sustained positive level of net-exports of grain was virtually unheard-of.

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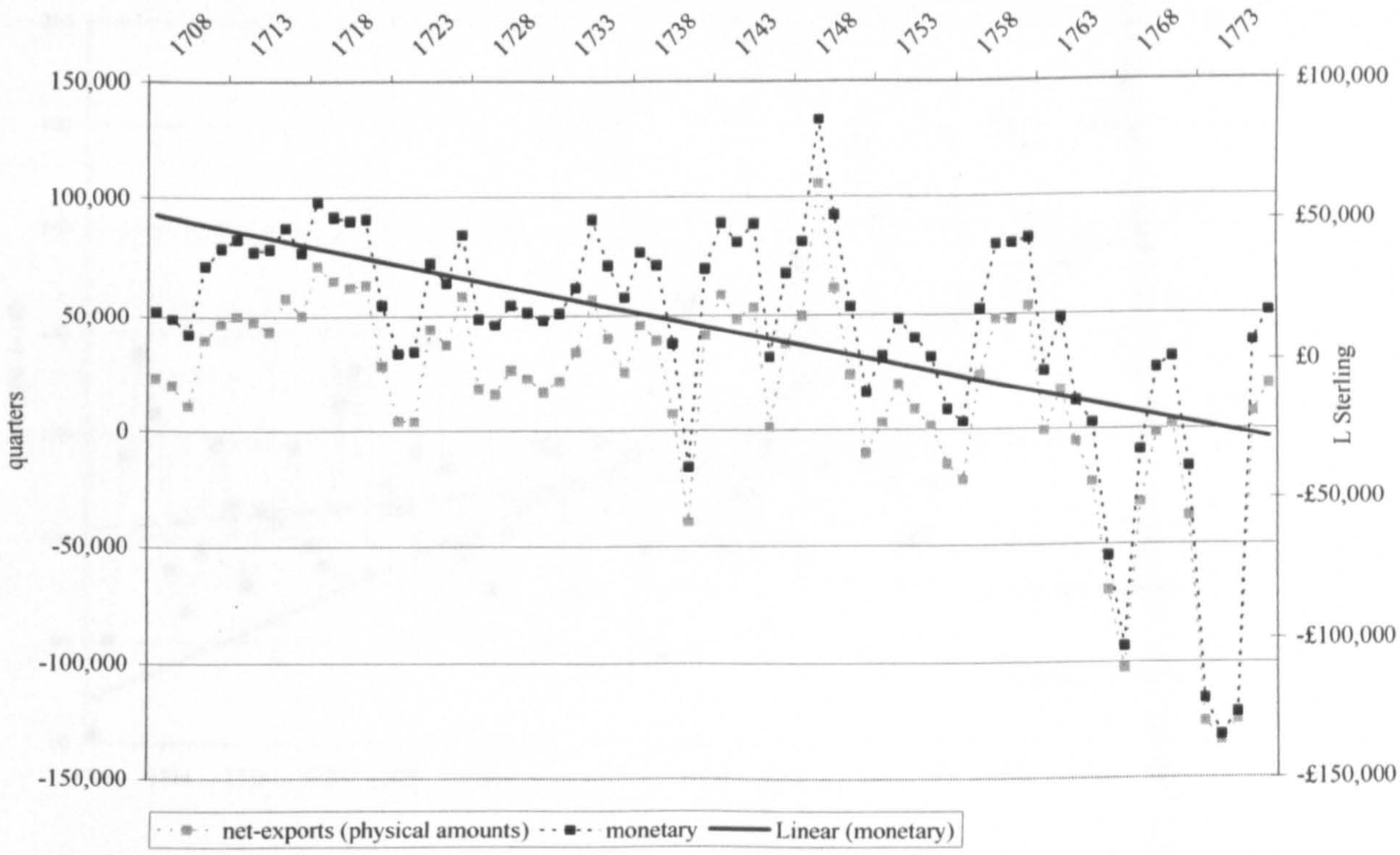
124 Ibid., ch. 4.

125 J. M. Gray (ed.), *Memoirs of the Life of Sir John Clerk of Penicuik, 1676-1755* (Edinburgh 1892), p. 159. Notable quantities of oats were *inter alia* imported from England for instance in 1738/9-41, when Scotland was hit by the worst provision crisis since "King William's Seven Lean Years".

Figure 13: Scottish Net-exports of all Cereals (excl. rice), 1708-1776.
Source: A. Bald, *The Farmer and Corn-Dealer's Assistant* (Edinburgh, 1780).



There were clearly surpluses available for exportation in the 1720s and 1730s. In England's case this period has been associated with low grain prices and accordingly an "agrarian depression" for the producers.[126] In Scotland, the situation appears to have been similar. Whilst it cannot be stated that prices were declining or stagnant during the first four decades of the century, as has been asserted for England[127], their upwards movement was not nearly as pronounced between 1707 and 1739 as after c.1740.

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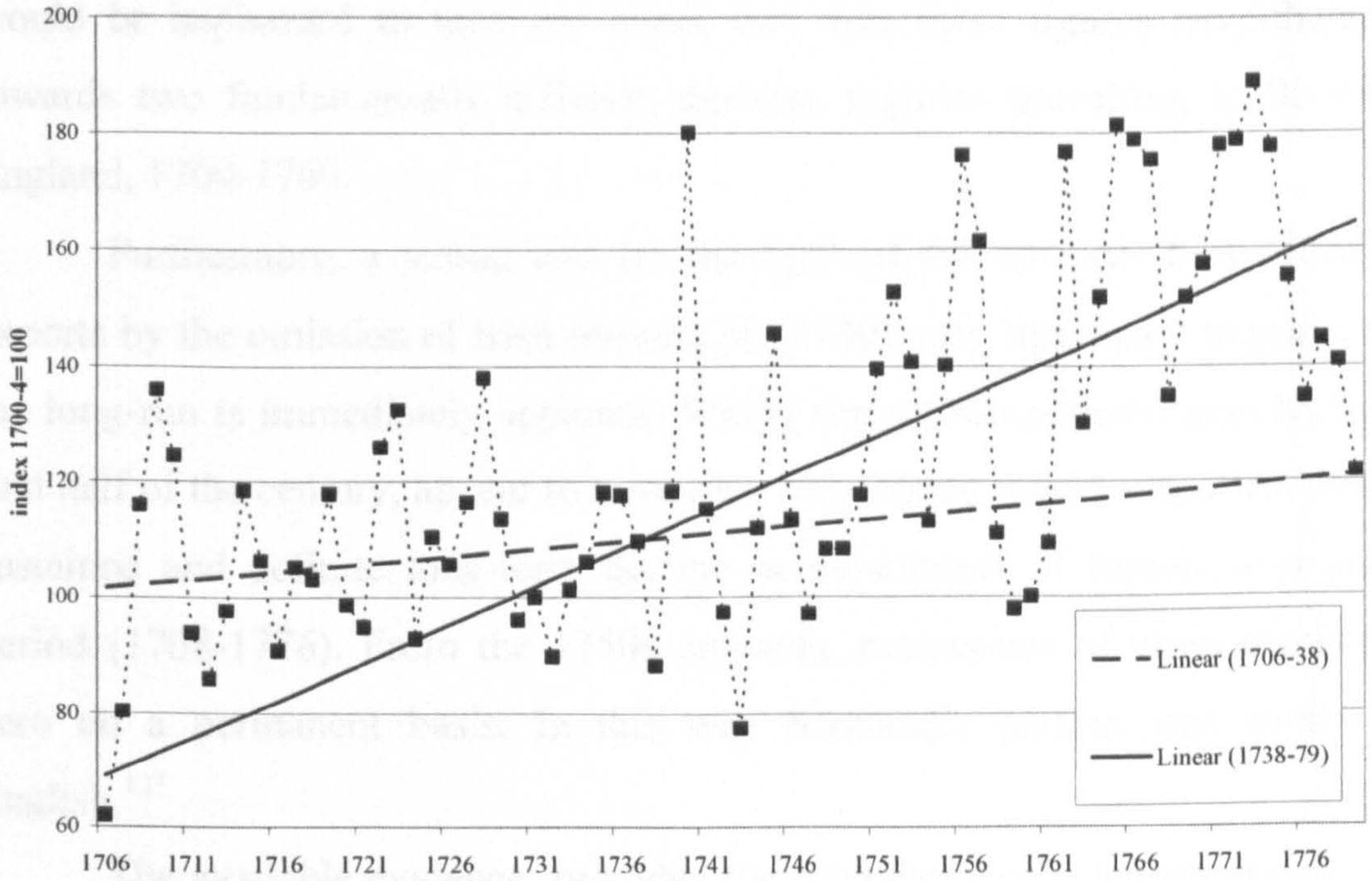
126 R. Allen, "Agriculture during the Industrial Revolution" in R. Floud and D. N. McCloskey (eds.), *The Economic History of Britain since 1700,* Vol 1. *1700-1860* (Cambridge, 2nd ed., 1994), pp. 96-122. N. F. R. Crafts, *British Economic Growth during the Industrial Revolution* (Oxford, 1985), ch. 2.

127 As the trend was already moderately increasing between 1700-1740. See figure 14.

Figure 14: Movements in Oats Prices in Scotland, 1700-1780

Gibson / Smout, *Prices*. Data: unweighted average of fifteen price series incorporating oats of different qualities quoted at nine different locations; average of 1700-1704 = 100



Perhaps different trends in the English and Scottish price level were also a result of an essential difference in macro-economic performance and stage of development of the agrarian regimes south and north of the Border. Whilst the Scottish and English trends in net-exports of cereals were broadly similar, 1700-1760[128], there are indications of differential economic development and under-performance. In the 1720s for instance, when a first peak of total exports was observable for both Scotland and England, the latter exported about ten times as much grain or twice as much as Scotland on a per capita basis.[129] Later on this difference appears to have been even larger. At the second export peak in the mid-1750s, Ormrod's nine year average for total grain exports from England records a high of about 950,000 quarters. The same average, computed on the basis of Bald's figures, works out at 50,000 quarters for Scotland, or about one-nineteenth of the English figure. Thus, as was the case in overseas trade in general, in the mid-1750s, England appears to have exported between two and four times as much grain on a per capita basis as Scotland

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128 Figures for Scotland: Bald, *Assistant*. England: M. Overton, *Agricultural Revolution in England. The Transformation of the Agrarian Economy 1500-1850* (Cambridge, 1996).

129 If a population differential of 5:1 is assumed. See ch. 6.

at any time.[130] There might have been at least twice as much surplus grain available for export in England as in Scotland during the period *in per capita terms*. Whilst it would be haphazard to read too much into this, these figures nevertheless point towards two fundamentally different agrarian regimes prevailing in Scotland and England, 1700-1760.

Furthermore, a strong and (in the light of the upwards bias added to net-exports by the omission of Irish imports pre-1740) very significant negative trend in the long-run is immediately apparent. Whilst certain sub-periods, mainly during the first half of the century, appear to have seen respectable export surpluses, there was a sustained and definite long-term decline in net-exports of cereals over the entire period (1708-1776). From the 1750s onwards, net-exports of grain reached below zero on a permanent basis. In this way Scotland's pattern was similar to the English.[131]

The available evidence, provided the price level calculations are correct, and the observable price level changes are indicative of shifts in aggregate supply and/or demand according to the Keynesian cross model, seems to suggest that Scotland might not have experienced as harsh an "agrarian depression" as England did in 1700-1740. But it is likewise important to note that the break in the trend (prices, net-exports of grain) in Scotland occurred between 1740 and 1760. Overall these aspects yield an interestingly close and "British" chronology. In both countries the period c.1700-1740 seems to have been marked by a higher per capita domestic cereal output (growth) than subsequent decades.[132] Thus for Scotland the years 1700-1740

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130 Figures for England have been derived from Ormrod, *English Grain Exports*, p. 25, Fig. 1. A nine-year moving average has been calculated for Scotland based on Bald's figures.

131 Overton, *Agricultural Revolution.*

132 The socio-economic structure of eighteenth century Scottish agriculture, its prevailing and changing patterns, as well as the applicable chronological framework have been subject to a notoriously inconclusive debate. L. Timperley, "The Pattern of Landholding in Eighteenth-century Scotland" in M. L. Parry and T. R. Slater (eds.), *The Making of the Scottish Countryside* (London, 1980), pp. 137-144; I. H. Adams, "The Agents of Agricultural Change" in Ibid., pp. 155-175; M. L. Parry, "Changes in the Extent of Improved Farmland" in Ibid., pp. 178-199. Critical on the aforementioned essays: G. Whittington, "Agriculture and Society in Lowland Scotland, 1750-1870" in Id. and I. D. Whyte (eds.), *An Historical Geography of Scotland* (London, 1983), pp. 141-164. Also I. D. Whyte, "Early Modern Scotland: Continuity and Change" in Ibid., pp. 119-141; D. Turnock, *The Historical Geography of Scotland since 1707* (Cambridge, 1982), ch. 4; I. H. Adams, "The Agricultural Revolution in Scotland: Contributions to the Debate" in A. Cooke, A. MacSween and C. A. Whatley (eds.), *Modern Scottish History, 1707 to the Present,* Vol. 3. *Readings 1707-1850* (East Linton, 1998), pp. 83-90. General works:

could have been merely a prolongation of the general European crisis of the late seventeenth century, when the consumers of grain theoretically had a better position in the market than the producers of the item.[133] From the Scottish producers' point of view in the 1720s and 1730s there was, instead of selling grain domestically, as much incentive to dispose of surpluses elsewhere, where they fetched better prices. But as early as the crisis years of 1738-41 Scottish agriculture badly failed to sustain the Scottish population at constant per capita consumption levels. In 1740 and 1741 almost no exports were recorded and huge amounts of surplus grain were imported. It seems as though this failure became a permanent situation thereafter. After 1740 and prior to the industrial period (1740-1770), net-imports were sustained at increasingly large levels on a virtually permanent basis.

As the grain trades will not be discussed further in chapter 5, a few short remarks on markets for Scottish grain may be made now, drawing on evidence from

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Campbell, *Scotland*. H. Hamilton, *An Economic History of Scotland in the Eighteenth Century* (Oxford, 1963); Whatley, *Industrial Revolution*; Whyte, *Scotland Before the Industrial Revolution*; Id., *Scotland's Society and Economy in Transition, c.1500-c.1760* (Basingstoke - London - New York, 1997). Lythe & Butt, *Economic History*; T. M. Devine, *The Transformation of Rural Scotland. Social Change and the Agrarian Economy, 1660-1815* (Edinburgh, 1994). Id., "The Transformation of Agriculture: Cultivation and Clearance" in Id., Lee & Peden (eds.), *Transformation of Scotland*, pp. 71-99. Case studies, such as I. D. Whyte, "George Dundas of Dundas. The Context of an Early Eighteenth Century Scottish Improving Landowner" in: *SHR*, LX (1981), pp. 1-13, are extremely desirable, but naturally limited in terms of the evidence and scope.

133 To the situation of a perhaps rather sluggish home market in Britain, c. 1700-1740, due to stagnant population levels, low prices and improved living standards, one has to add some dislocation in northern European grain markets following declining population levels, famine and farm desertion. With regard to Scotland, however, it is an interesting – yet often overlooked – fact that, although since the 1690s grain prices not only moved increasingly in unison, but normally also showed a decrease in volatility, this trend reversed temporarily. Between roughly 1720 and 1740 the variance of prices between different locations increased again. As a decrease in price volatility across regions is commonly accepted by economic historians to indicate an increase in market integration, an increase in price volatility across regions might be seen as a reverse in the process of market integration. England: Crafts, *British Economic Growth*, ch. 2. General: J. De Vries, *The Economy of Europe in an Age of Crisis, 1600-1750* (Cambridge, 1976). Ormrod, *English Grain Exports*, ch. IV. For Poland and the factors influencing a sluggish performance of grain exports, A. Simsch, "Polen 1650-1815" in W. Fischer, J. A. Van Houtte, H. Kellenbenz, I. Mieck and F. Vittinghoff (eds.), *Handbuch der Europäischen Wirtschafts- und Sozialgeschichte,* Vol. 4. *Von der Mitte des 17. zur Mitte des 19. Jahrhunderts* (Stuttgart, 1993), pp. 720-746, at p. 738f. For changes in Scottish grain market integration after the 1720s, see A. J. S. Gibson and T. C. Smout, "Regional Prices and Market Regions: The Evolution of the Early Modern Scottish Grain Market," *EcHR*, Second Series, XLVIII (1995), pp. 258-282, at p. 271. Cf. L. Li, "Integration and Disintegration in North Chinese Grain Markets, 1738-1911," *JEcH*, LX (2000), pp. 665-99.

the Scottish trade statistics, 1755-1760, prior to moving on to placing the grain trade into a wider macro-economic picture (section 4.3.2.3.2.4 below).

4.3.2.3.2.3 Markets for Scottish Grain

Barley[134], and its processed equivalent (malt), and oats were Scotland's main exports within the grain trades, oats taking an unsurpassed lead. Oats had always been and remained the basic source of calorific intake in Scotland until the end of the eighteenth century.[135] It was the main crop cultivated in Scotland.[136] Whenever there was a surplus of grain available in Scotland for export, oats was its main component. By the same token, whenever large imports of grain took place these consisted mainly of oats and oatmeal. Rye and wheat were grown (and traded) as well, but in certain locations only, and to a much lesser extent than barley and oats.

Due to the fact that the available grain trade statistics do not break down imports and exports by countries, it is not possible to establish Scotland's markets for grain during the crucial period prior to 1755. For England, Ormrod has stressed the importance of the Netherlands as the main export destination, 1696-1760.[137] If the second half of the 1750s were in any case significant for the preceding five decades, Scotland would have presented a different case. Scottish barley was exported chiefly to Denmark, Norway and the Iberian Peninsula. Malt was shipped predominantly to Scandinavian and German territories.[138]

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134 Including bere and bigg.

135 R. Mitchison, "The Movements of Scottish Corn Prices in the Seventeenth and Eighteenth Centuries," *EcHR*, Second Series, XVIII (1965), pp. 278-291, at p. 280.

136 As, apart from certain high-powered agrarian regimes across exceptionally fertile patches in the Central Lowlands, much of Scotland's land available for and adaptable to arable farming was exceptionally wet and marginal. This led to a fairly high inter-annual volatility in harvest yields, making much of the land available for farming either too precious or unsuitable for producing cash crops for rent payments and exports on a large scale. A. Slaven, *The Development of the West of Scotland 1750-1960* (London, 1976).

137 Ormrod, *English Grain Exports*, ch. II.

138 Presumably accounting for the strong beer brewing and consumption traditions in these countries.

Table 13: Exports of Barley from Scotland, 1755-1759

TNA, Customs 14

	Denmark & Norway	Man	Portugal	Spain	Sweden	Other
1755	21%	18%	39%	0%	12%	10%
1756	47%	53%	0%	0%	0%	0%
1757						
1758						
1759	46%	3%	26%	20%	3%	2%
AVE	*38%*	*25%*	*22%*	*7%*	*5%*	*4%*

Table 14: Exports of Malt from Scotland, 1755-1759

TNA, Customs 14

	Denmark&Norway	Sweden	Germany Prussia		Other
1755	44%	44%	12%	0%	0%
1756	31%	57%	0%	12%	0%
1757					
1758					
1759	61%	21%	13%	0%	5%
AVE	*45%*	*41%*	*8%*	*4%*	*2%*

Table 15: Exports of Oats from Scotland, 1755-1759

TNA, Customs 14

	Denmark&Norway	Ireland	Other
1755	83%	17%	0%
1756	17%	83%	0%
1757			
1758			
1759	94%	0%	6%
AVE	*65%*	*33%*	*2%*

Table 16: Exports of Wheat from Scotland, 1755-1759

TNA, Customs 14

	Sweden	Ireland	Portugal	Other
1755	99%	0%	0%	1%
1756	2%	98%	0%	0%
1757				
1758				
1759	2%	0%	70%	29%
AVE	*34%*	*33%*	*23%*	*10%*

If imported, barley and oats were predominantly obtained from Ireland. Germany[139] did play a not unimportant role from the 1760s onwards (when Scotland turned into a net-importing nation for good). Only when the Irish market did not prove fully capable of accommodating Scotland's import demand, other markets, mostly Imperial Germany and the Netherlands would attain larger shares amongst total imports. Wheat on the other hand came predominantly from North America and Baltic ports (Danzig, Ducal Prussia), as well as Germany in smaller quantities.[140]

Ireland therefore emerges as a fairly strong market on either side of the balance sheet. Whenever there was a serious shortage of cereal in Scotland, Ireland would be the main supplier. Whenever Scottish agriculture had an exportable surplus, notable quantities would be shipped to Ireland.[141] This trading pattern was a natural result of the geographical proximity of the two, which by the same token suggests that Scottish-Irish trade in grain was largely limited to the western areas of Scotland.

4.3.2.3.2.4 The Cyclical Pattern in the Grain Trades: Tracing the Scottish Harvest Cycle, 1708-1760 (and beyond)

The pattern of Scotland's grain trades remained short-cyclical; with cycles lasting 5.33 years on average over the entire period (see Fig. 15, 16 and Table 17, 18 below).[142] Only the downward oscillations of the cycles increased over time, thus leading to a strong negative linear trend in the long run.

These cyclical movements obviously reflected movements in Scotland's pre-industrial harvest cycle, as will be apparent from a synoptic analysis of the available price, net-exports and excise statistics (see below). Net-exports of grain frequently moved inversely to grain price movements, with cycles of an identical average

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139 The German Empire in its boundaries of 1648 (Treaty of Westphalia), excluding Ducal Prussia.
140 Roessner, *Multilateralism*.
141 Cochran, *Scottish Trade with Ireland*.
142 The *malt* cycle differed somewhat from the one observable for the main bread grains – presumably because malt is a processed good, the availability of which is contingent upon the size of the barley harvest – but likewise featured export minima in 1723-5, 1741, 1746, 1752, 1757, and 1758. Net exports of *malt* equal exports of malt from Scotland, since the import of malt was prohibited.

duration for both (5.33 years, 1708-1777).[143] Net-export minima and price maxima for grain coincided regularly with each other, with reports of food riots, harvest failures and, most significantly with *excise yield* lows. All of these are evidence on a contraction in aggregate supply (and most certainly also demand). Such periods were *inter alia* 1724-5, 1738-41[144], 1755-6, and 1771-3.[145] There were other points in time in-between which might, albeit similar, have been less critical in terms of the symptoms of a decline in GDP/GNP (such as rises in prices, unemployment, mortality). Such years were obviously troughs in Scotland's harvest cycle.

143 If price movements are interpreted in terms of the Keynesian cross-model of aggregate supply and demand and prices obtained on the basis of a free market mechanism.

144 P. R. Roessner, '"It is certain that nothing like it ever hapned in Scotland for 200 years past'. The 1738/9-41 Crisis in Scotland as an Adverse Supply Shock of the Ancien Régime Type and its Impact on Subsequent Eighteenth Century Economic Development," article in preparation.

145 Lythe, "Meal Mobs"; Roessner, "1738/9-41 Crisis".

Table 17: The Cyclical Pattern of Scottish Agrarian Production, as visible from Price Peak Years and Years of Net-exports' Troughs, 1708-1777
Prices: Gibson / Smout, *Prices*. Net-exports of grain: Bald, *Assistant*.

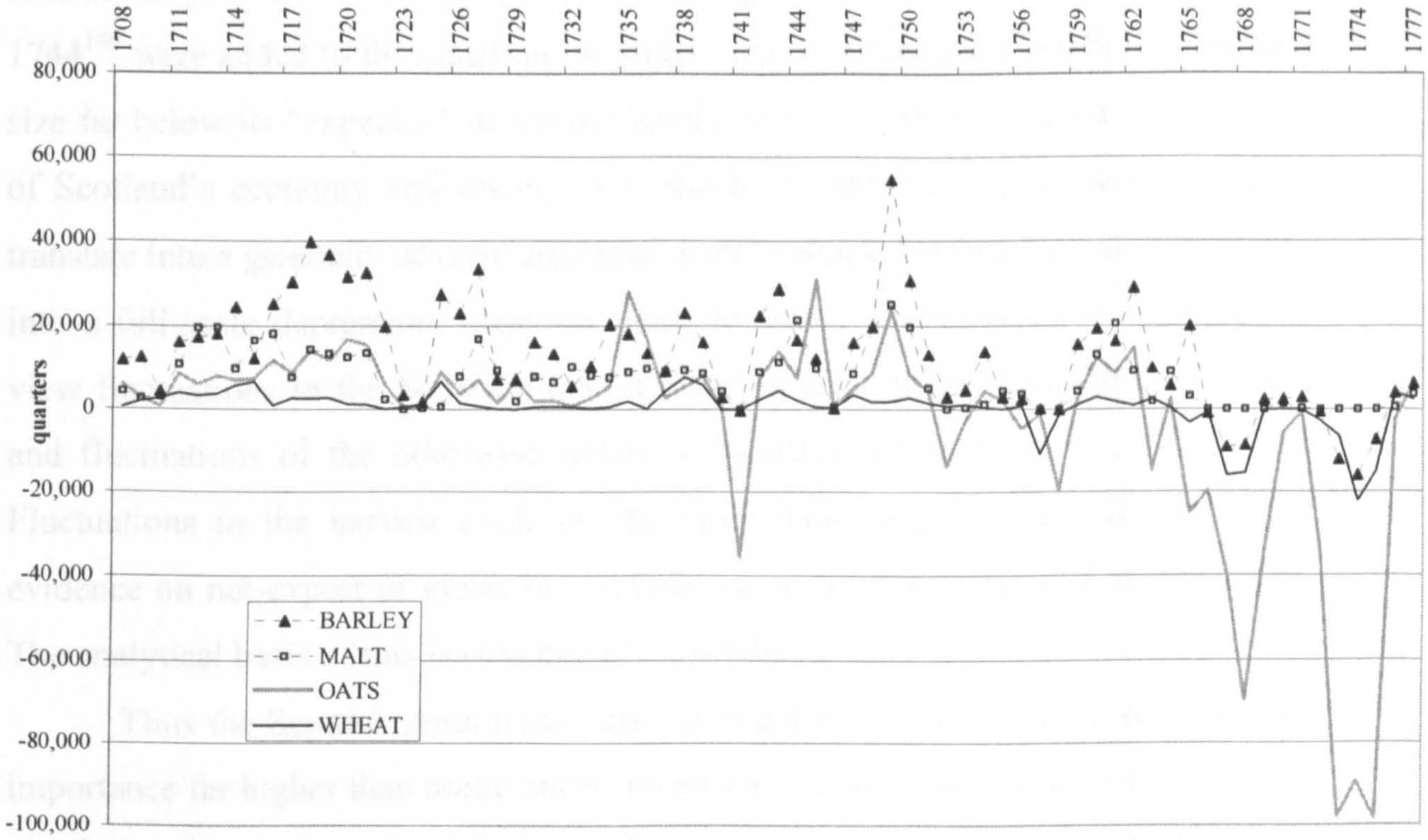
Price Peaks	Difference to Preceding Peak	Net-Exports Troughs	Difference to Preceding Trough
1709		1710	
1714	5	1714	4
1719	5	1717	3
1723	4	1723	6
1728	5	1729	6
1735	7	1737	8
1740	5	1741	4
1745	5	1746	5
1752	7	1752	6
1756	4	1758	6
1762	6	1763	5
1765	3	1768	5
1773	8	1774	6
Average Duration of Cycles	5.33		5.33

Table 18: Cyclical Minima in Exports of Barley, Oats, Malt and Rye (grain, meal/flour)
Bald, *Assistant*.

Barley	*1710*	*1715*	*1720*	*1724*	*1729*	*1732*	*1737*	*1741*	*1746*	*1752*	*1758*	*1767*	*1773*
Oats	x			x		x	x	x	x	x	x	1768	1772
Malt	1709	1714/1717		1723	x			x	x	x	x	1765-69	x
Wheat		1716		1722	x	1733	1736	x	x	1755	x	1765-69	x
Rye		x	1719	1723	x	x	x	x	x	1750-1752	x	x	x

Figure 15: Net-exports of Oats, Barley, Malt and Wheat

Bald, *Assistant*.



As short cycles were essentially the expression of yield instability and partly determined by exogenous shocks such as regularly occurring harvest failures, there seems to be reason to discard the notion of a "business cycle" for this type of fluctuation.[146] Given the particular structure and stage of development of the Scottish economy[147], however, harvest failures were almost certainly no entirely random and thus not an entirely exogenous variable.[148] In good years a propensity to harvest failure built-in to Scotland's pre-industrial agriculture would have no large overall

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146 M. A. Denzel, "Konjunkturen im Mittelalter und der Frühen Neuzeit" in G. Schulz, C. Buchheim, G. Fouquet, R. Gömmel, F.-W. Henning, K. H. Kaufhold and H. Pohl (eds.), *Sozial- und Wirtschaftsgeschichte. Arbeitsgebiete – Probleme – Perspektiven* (Stuttgart, 2nd ed., 2005), pp. 191-215, esp. at p. 195, p. 204f. W. Abel, *Agrarkrisen und Agrarkonjunktur in Mitteleuropa vom 13. bis zum 19. Jahrhundert* (Hamburg - Berlin, 3rd ed., 1978), Engl. transl., *Agricultural Fluctuations in Europe from the Thirteenth to the Twentieth Centuries* (London, 1980). Abel's analytical framework has been adopted by subsequent scholars working on the early modern European (agrarian) economy, e.g. Slicher Van Bath, *Agrarian History*. A most recent and lucid discussion of the Abel thesis can be found in W. Achilles, *Landwirtschaft in der Frühen Neuzeit* (Munich, 1991).

147 Ch. 6 and Appendix A 12.

148 Agriculture accounted for 80 per cent and more of total incomes and employment. The prevailing farming system(s) had a built-in propensity to harvest failure that was – as was the case in most early modern and pre-industrial European countries – perhaps not large but certainly larger than zero, for instance because rent payments kept the amount of available seed corn (circulating capital) at suboptimal levels.

effect on the size of the harvest. But it could wreak havoc whenever adverse climatic conditions such as the "freak years" prevailing in north-western Europe c. 1738-1744[149] were added to the equation. In those years it reduced the level of output to a size far below its "expected" or natural level (such as 1738-41). Given the structure of Scotland's economy and society such shocks to agrarian supply were bound to translate into a generally adverse aggregate supply shock, leading the entire economy into a full-scale depression, often for years to come. Therefore, it is suggested to view fluctuations in the Scottish harvest cycle as a rough approximation of trends and fluctuations of the otherwise unknown Scottish national income, 1707-1776. Fluctuations in the harvest cycle on the other hand may be reconstructed using evidence on net-export of grain, in combination with price series and excise yields. The analytical basis of this is enlarged in Appendix A 12.

Thus the Scottish grain trade patterns might have been of a macro-economic importance far higher than borne out by either the export share of grain production or the share of grain imports and exports in total Scottish imports and exports. In the light of the complete absence of a macro-economic history of eighteenth-century Scotland so far[150], the following, rather than being definitive, should be understood as an agenda for detailed future research.

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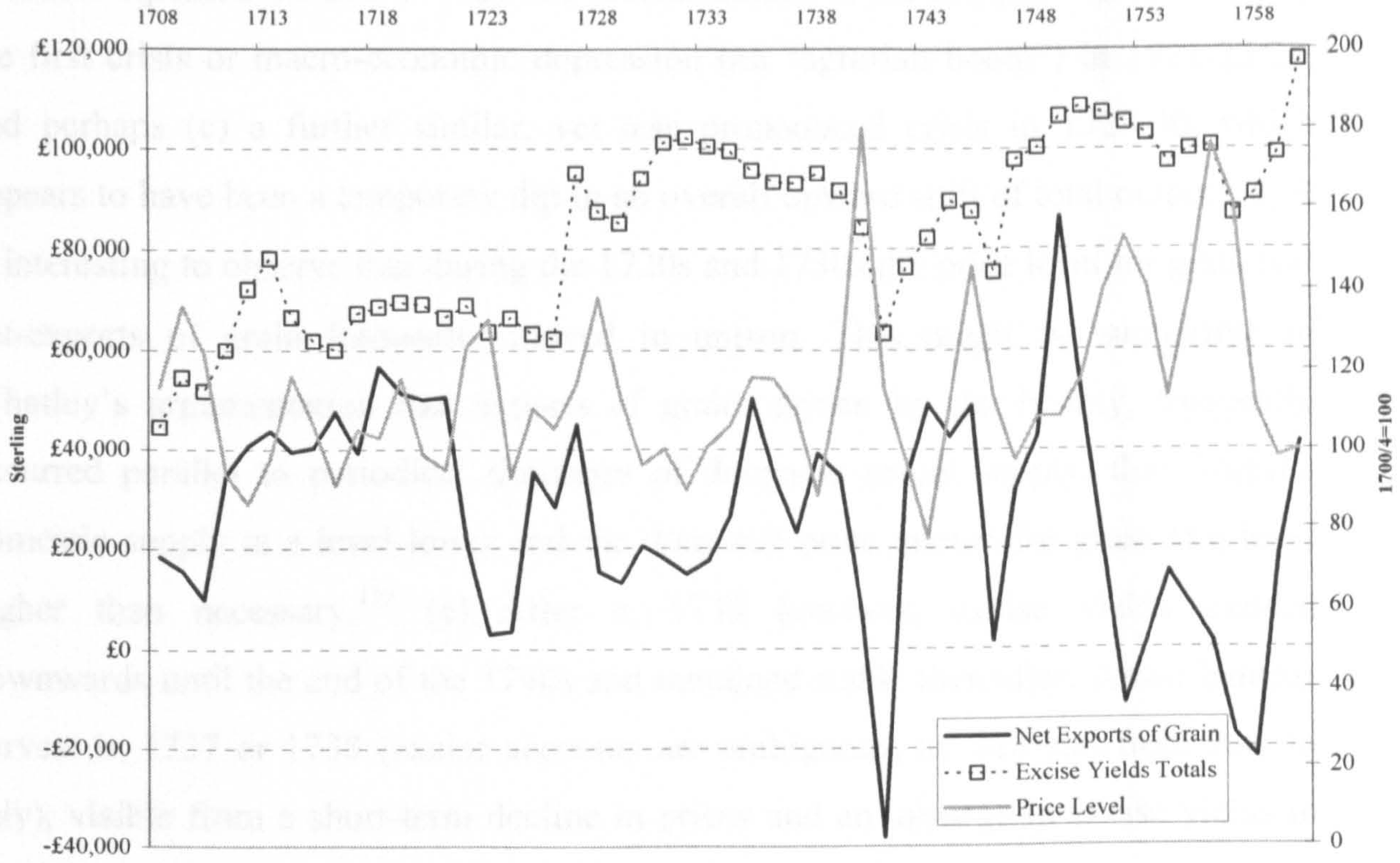
149 A. E. Imhof, *Aspekte der Bevölkerungsentwicklung in den nordischen Ländern 1720-1750*, 2 Vols. (Bern, 1976), Vol. II.

150 The first and only attempt at sketching such an agenda – which was never implemented by subsequent research – remains T. C. Smout, "Where Had the Scottish Economy got to by the Third Quarter of the Eighteenth Century ?" in I. Hont and M. Ignatieff (eds.), *Wealth and Virtue. The Shaping of Political Economy in the Scottish Enlightenment* (Cambridge, 1983), pp. 45-72.

Figure 16: The Price Level of Oats and Scotland's Net Exports of all Cereals Compared (1708-1777)



(a) The second decade of the century (1708-1720) would have seen rather favourable conditions for the Scottish consumer, with low agricultural prices, and a fairly high level of net-exports. Excise yields were expanding between 1708 and 1714, only to collapse in that later year, but prevailing at a stable level until c.1728 that was higher than in 1708. Thereafter they trended upwards. As between 1708 and 1713 new duties on candles (1711), hops, hides, skins (1712), printed linen, calicoes, soap, paper, calicoes, mum and malt (1713) were introduced[151], the increase in excise yields totals from 1708-1713 probably owed more to the increase in the level of taxation than an increase in real output. Thus between 1708 and 1727 the trend in total agrarian output might in fact have been rather horizontal, and agrarian output might have remained largely stagnant. At a constant population size and the absence of structural change, Scottish per capita national income growth could have been about zero, c. 1708-1728; at modestly growing population levels, per capita incomes might even have declined. This hypothesis is supported by recent calculations of per

151 NAS, E554/1, *Gross and Net Produce of Excise in Scotland*, 1707-1770. The Malt Tax was introduced in 1713, but not charged until 1723.

capita consumption of agrarian products in Scotland made by Douglas, using the "demand equation method".[152] (b) The second decade of the century was followed by the first crisis or macro-economic depression (an "agrarian boom") in 1721-23/24, and perhaps (c) a further similar, yet less pronounced crisis in 1728-30, which appears to have been a temporary dip in an overall upward shift of total output. (d) It is interesting to observe that during the 1720s and 1730s the price level for grain and net-exports of grain frequently moved in unison. This might be supportive of Whatley's argumentation that exports of grain, driven by the bounty, frequently occurred parallel to periodical shortages of domestic cereal supply, thus keeping domestic supply at a level lower and the domestic price quoted for grain at a level higher than necessary.[153] (e) After c. 1733 however, excise yields trended downwards until the end of the 1740s and remained stable thereafter. A last bumper harvest in 1737 or 1738 (excise accounts are ambiguous, as they run from July to July), visible from a short-term decline in prices and an upsurge in excise yields in 1737-8, was followed by what was probably the worst macro-economic depression Scotland witnessed in the eighteenth century. Between 1738/9-1741, all branches of agrarian and industrial output contracted. Mortality levels increased to pathological levels. Food riots occurred and emergency imports of food from abroad were commissioned.[154] (f) Thereafter, excise yields, as well as net-exports of grain, recovered to pre-crisis levels without significantly increasing in trend until after 1760. Average total excise yields in the 1750s remained at largely the same level as in the late 1720s and 1730s. (g) Stagnation was perpetuated by the *Jacobite Rebellion* of 1745-6. This event, albeit regionally limited, nevertheless appears to have had a considerable macro-economic impact, if excise aggregates for Scotland as a whole are examined alongside the customs accounts. It was mainly the east of Scotland, including large fertile ("economically developed") areas in the Lowlands that were temporarily taken by the Jacobites.[155] Ports on the east coast, such as

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152 See chapter 6 below.

153 Reports of popular unrest are not infrequent for this period. C. A. Whatley, "Food Riots," pp. 200-202.

154 Roessner, "1738/9-41 Crisis".

155 Whilst non- or under-recording by British customs and excise during the rising in those outports and excise precincts taken by the rebels does not necessarily mean that nothing (or less than

Aberdeen, Montrose and even Leith fell temporarily – mainly during fall 1745 and spring 1746 – short of a considerable amount of economic activity, as most would be closed to officially recorded business "on Acc.^{t} of the Rebellion"[156]. When Edinburgh and its precincts, including the port of Leith were taken by the rebels in September 1745, the latter "sold all the goods that was [*sic*] in the Customhouse".[157] Since under the British Customs administration large amounts of goods were stored in warehouses[158], often for years to come, such acts would have equalled a considerable re-distribution of property. This would not always have led to a more productive employment of resources, as the Jacobites consumed what they seized. Sometimes cities were openly ransacked. When the Jacobites threatened to plunder and lay fire to the town of Glasgow in 1745, the burghers of the latter wisely decided to pay a ransom of 12,000 linen shirts, 6,000 coats, 6,000 pairs of hose, 6,000 pairs of shoes and 6,000 bonnets, totalling £14,000 Sterling in value.[159] There is no doubt that property was lost and capital – potentially productive capacities – was re-distributed on a wide scale during the '45 Rebellion.

This admittedly rough sketch of the macro-economic framework (1700-1760) needs much further refinement and enlargement of the quantitative as well as qualitative source basis in the future. The implications are nevertheless clear. The available statistical material might allow writing a quantitative economic history of eighteenth-century Scotland. On a side note a further remark as to the grain trades and their macro-economic relevance may be made. Scholars have suggested that Scottish society in the early decades of the eighteenth century was particularly

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usual) was either being produced or traded in the areas affected, the excise and customs accounts can be interpreted towards at least a regionally limited contraction in output.

156 The larger east coast ports such as Aberdeen, Dundee, Leith, Montrose and Perth were closed down or taken by the Jacobites for the best part of the period between September 1745 and February/March 1746. NAS, E504/1/1, I/1746 (Aberdeen); E504/11/1, I/1746 (Dundee); E540/22/2 (Leith), III/1745, Goods Imported, Nr. 115; Entries on Wine Nr. 14; NAS, E504/24/1 (Montrose), III/1745, IV/1745, II/1746; NAS, E504/27/1 (Perth), II/1746.

157 NAS, RH2/5/11/51, *Memorandum for William Copland Relating to Seizure of Tobacco Exported by him from Aberdeen in 1745.* Parts of the cargo had been shipped to Leith.

158 Either unclaimed or awaiting a final decision as to whether these goods were to be re-exported or retained for domestic consumption. See ch. 3, section 3.2.4.2 above.

159 J. Gibson, *The History of Glasgow. From the Earliest Accounts to the Present Time* [...] (Glasgow, 1777), p. 113f.

inclined to social, even religiously motivated unrest.[160] In the light of the above framework this propensity to riots can be partly explained by economic motives, as the 1720s, 1730s and 1740s were times of pronounced depression in Scotland. It is for instance certainly no coincidence that major revolts coincided with downturns in the business cycle, i.e. at times marked by price increases, and falls in excise and net-exports figures (such as 1722/3 and 1738-41). Both the Malt Tax riots in the Lowlands and the Levellers' Revolt in Galloway in 1723 had a strong economic component, if not cause.[161] Overall it is unlikely that Scottish per capita national income would have increased between c. 1720 and 1750. Rather than remaining stagnant, it might well have even declined in what was a crucial period prior to the industrial transformation.

The discussion will now turn to two branches of trade that were not recorded after 1707, and which have accordingly been neglected by previous research. The English market for Scottish exports post-1707 will be considered first. Scotland, remaining an agrarian economy throughout the period under consideration, based her potential for economic growth to a not inconsiderable extent on the performance of her traditional agrarian economy. One of the mainstays of this sector was cattle production. This branch of agrarian economic activity received significant stimuli for expansion from the English market, throughout the seventeenth century, but increasingly so after 1707.

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160 Whatley, "1720 Food Riots," pp. 200-202; Id., *Scottish Society*, chs. 4, 5, esp. pp. 170-4, pp. 184-196. C. G. Brown, *Religion and Society in Scotland since 1707* (Edinburgh, 1997), pp. 77-84.

161 The first was occasioned by the final imposition of what the excise administration should have levied since 1713 (but never dared), a tax that was thought to be prohibitive and unjust as it related to a Scottish essential (ale, whisky). The Levellers' revolt took place in reaction to a widespread expropriation and proletarization of tenants in the south-west, being the result of an increase in agrarian commercialization. It also overlapped with a period of general economic depression. The same applied to the 1740s food riots. Dodgshon, *Land and Society*, p. 257f.; Roessner, "1738/9-41 Crisis".

4.3.3 Unrecorded Trades (I): Trade with England 1707-1760

After 1707, Anglo-Scottish trade ceased to be recorded. This fact considerably distorts the available evidence as to Scotland's comparative advantages, as seemingly apparent from the *overseas trade* statistics. Whilst nothing is known on imports post-1707, a significant share of Scottish exports can be asserted to have gone to England after 1707. The point can be made using pre-1707 evidence on Scottish-English trade, as well as contemporary accounts and estimates of the number of cattle and value of Scotch linen exported to England after 1707.

As noted previously, Scottish exports to England around 1707 were dominated by linen and cattle. These items accounted on average for about 90 per cent.[162] If Smout's observations as to the weight of England in Scotland's total trade are correct, these two items would therefore have captured at least 45 per cent, factually much more, of Scottish *total foreign exports* c.1700.[163] Circumstantial evidence suggests that cattle and linen production either retained or even increased their economic significance in a slowly expanding but structurally unchanged Scottish economy after 1707. This might not necessarily have increased their export share (but linen did increase its export share over time). But at least in absolute numbers, exports of cattle and linen to England grew considerably over the period, matching or even surpassing the growth rate of Scotland's overseas trade, in particular the colonial trades. Between 1700 and 1760 England remained Scotland's largest and most important foreign market.

Scottish Linen output increased remarkably over the period. Between c.1730 and 1760 it tripled in physical amounts.[164] Durie has estimated the share of Scottish linen exported from Scottish and English ports (which can be taken as an approximation of the "export share") at levels ranging from 12 (1743/7) to 27 per cent of total *marketed* Scottish output (1758-62). A tripling of total Scottish output c. 1730-1760 thus was accompanied by a doubling in the "export share", which might

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162 Present chapter, section 4.1.1.1.

163 Smout, *Trade*. Especially if it is accepted that most of the linen sent to England between 1699/1704 was destined for re-export to the English colonies. Suggested by Dr T. Truxes at the 2003 Dublin conference on merchant networks in early modern Europe.

164 I.e. yards stamped for sale, disregarding different quality brands contained in these aggregates and accordingly different prices. Durie, *Linen Industry*.

well have led to a growth in Scottish linen exports by at least a factor of six c. 1730-1760. This matches up with contemporary reports. One estimate quoted the value of Scottish linen sent to England (presumably mostly to be re-shipped to the colonies) at about £300,000 Sterling in 1765.[165] This yields an increase by a factor of *about* seven for average imports of Scotch linen into England in 1765 compared to 1699/1704 (about £43,000 Sterling at current 1696 English values f.o.b.). *Cattle* exports (not much can be said about Scottish cattle *output*) from Scotland to England roughly tripled over the same period. Whilst around 1707, Scottish cattle exports to England were estimated at about 24,000 to 30,000 heads per annum, this figure had risen to circa 80,000 around 1750.[166] If, therefore, as post-1707 quantitative and qualitative evidence suggests, cattle exports continued to expand at rates similar to Scotland's gross total trade overseas, and linen exports even outpaced this rate, then the growth rate for exports from Scotland to England circa 1700-1760 is likely to have matched or rather surpassed the growth rate of Scotland's exports *overseas*.[167] Assuming the relation of Scottish exports to England "at the eve of Union" at 40 to 50 per cent of total Scottish exports, exports to England in 1760 should have at least matched Scottish domestic exports overseas in value terms (disregarding the newly emerged colonial trades and continental markets for re-exports). This is what appears to have been the case, as some "speculative arithmetic" on England's share in total Scottish exports towards the end of the period under consideration (1765) in chapter 5 will show. As a result, England would have remained Scotland's largest market, even far surpassing total exports to the American colonies and the Netherlands in and around 1760. The implications of this will be discussed further in chapter 6.

Another commercial activity that successfully evaded official recording efforts was the Scottish *tea* trades. As these were almost entirely based on illegal activity, they represented an important mainstay of Scottish trading activity in the

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165 Which is a fairly reliable estimate. A. J. Durie, "The Markets for Scottish Linen, 1730-1775," *SHR*, LII, 1 (1973), pp. 30-49, at p. 36.

166 Lythe & Butt, *Economic History*, p. 112f. Koufopoulos, Cattle Trades, pp. 172-189. D. Woodward, "A Comparative Study of the Irish and Scottish Livestock Trades in the Seventeenth Century" in L. M. Cullen and T. C. Smout (eds.), *Comparative Aspects of Scottish and Irish Economic History, 1600-1900* (Edinburgh, 1977).

167 Including re-exports of colonial staples such as tobacco and sugar products, circa 1700-1760, which can be approximated by the partially biased index measures for GTT (1755-1783) and customs yields (1707-1783). Nothing can be said about linen output and exports prior to 1727.

eighteenth century along the legal trades. Like the emerging tobacco trades, which were booming since about 1736, the tea trades were growing especially fast after c. 1740. And like the tobacco trades they were a product of the new institutional superstructure, 1707, or part of the "third pillar" (see chapter 1) of Scotland's commercial activity in the eighteenth century. As tobacco smuggling has received ample attention elsewhere[168], the following will present a case study of a rather neglected branch of Scottish commercial life in the eighteenth century instead, largely based on previously un-used sources.

4.3.4 Unrecorded Trades (II): The Scottish Tea Trades, 1700-1760

It cannot be doubted that the tea smuggling business attained considerable dimensions in the eighteenth century. A well informed contemporary for instance quantified illegal tea imports from Gothenburg (the main supplier) into Scotland at about 1.2 million lbs per annum towards the end of the 1770s. At a valuation of 3 to 4 s per lb this might have worked out at a total value between £360,000 and £480,000 Sterling. In value terms this matched officially recorded tobacco imports, average figures of which amounted to £456,583 Sterling (1770-1776).[169] It is striking therefore that previous research has failed to point out that – alongside the flourishing legal and illegal tobacco trades, as well as the overland trades to England – a third and most important mainstay of Scottish commercial activity developed after 1740, which in terms of scale appears to have come close to Scotland's officially captured tobacco trades. Due to the nature of this business, however, and deficient coverage in official records, this was a very silent, yet significantly large commercial activity, which closely linked back into Scottish social, as well as macro-economic experience.

The history of tea trading and consumption in Scotland prior to the 1800s has yet to be written. Scholars working on England have incorporated stray references to

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168 Nash, "Tobacco Trades".

169 Tea imports from Gothenburg: NAS, GD 51/3/194/1-2 *10 January 1785, Letter from Campbell to Henry Dundas Regarding Tea Trade / Tea Smuggling.* Valuation: TNA, Customs 14.

Scottish circumstances whenever these fit into their argument.[170] And while the Scottish tea market has received some attention, in particular immediately prior to the 1784 reform, almost nothing is known about the earlier decades of the eighteenth century. The following will therefore be based on a preliminary and admittedly eclectic evaluation of existing Scottish sources.[171] One of the major aims of this section will therefore be to point out directions for future research. The main problem is the aspect that Scotland's tea trades can barely be quantified, yet appear to have been considerable enough in volume terms in order to account both for an ample domestic supply with tea, as well as leaving large quantities for re-export.

As far as can be determined the history of the Scottish tea trades prior to the 1784 reform was a story of interloping and entirely illicit activity, as the only legal channel from the British legislative point, trade through the English East India Company, was largely irrelevant for Scotland in the period. From the English point of view the Act of Union (1707) did not alter the institutional framework for Scottish trade with Asia, as the Asian trades were notionally contingent upon membership in the East India Company – which had theoretically been open to London-based Scots prior to 1707. A first attempt at a *Scottish* East Asia trading scheme on *Scottish* account had famously failed prior to the Union. This, and the EIC monopoly, which forbade the foundation of a Scottish company post-1707, led to a very peculiar Scottish trade pattern for tea after 1707.

It is probable that tea did not occupy the same socio-economic weight and role in Scotland as in England, where mass consumption commenced relatively early in the century. In 1783 for instance, there were about 32 times as many registered tea dealers in England and Wales as in Scotland.[172] At a per capita basis (i.e. at a population differential of c. 5.58:1), there were thus about six times as many registered tea dealers in England as in Scotland. Towards the end of the eighteenth century, the density of tea merchants per 1,000 inhabitants in Scotland was still only

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170 H.-C. Mui and L. H. Mui, "Smuggling and the British Tea Trade before 1784," *American Historical Review*, LXXIV (1968), pp. 44-74.

171 Mainly customs memorials and seizure accounts, as well as contemporary merchant letter and account books deposited in the NAS.

172 H.-C. Mui and L. H. Mui, *Shops and Shopkeeping in Eighteenth-Century England* (London, 1989), p. 251, Tab. 41.

half of that of England and Wales.[173] "The high ratio of population to tea dealers in Scotland requires little explanation. Given its social and economic structure, one would have been surprised, if not suspicious, had the ratio been low."[174] In earlier decades the situation would have been hardly different, but possibly even more extreme.

A priori a radically lower density of tea licences per population might be due to a variety of reasons. A generally less well developed distribution chain could be the result of a lower per capita national income. This would have left less of a spending margin for non-essentials in Scotland. Part of the explanation for Scotland prior to 1784, however – in addition to an undeniably lower per capita income – must be looked for in the fact that the main supplies came from illicit and illegal supply channels. They were sold without licence.[175] As mentioned earlier[176], the smuggler was an intrinsic part of Scottish economic and social life, especially in the first five decades after the Union. Thus the relation of merchants factually dealing in tea to the number of licensed tea dealers might have been very large, and the coefficients cited above might not be indicative of Scottish tea consumption relative to England's. Furthermore a lower per capita consumption of tea – regardless of whether legal or undeclared – could also have been the result of preference and taste. It has for example been suggested that the main reason why tea never became successful on the *German* market in the eighteenth century was less due to budget or income constraints than preference.[177] It is impossible at present to determine which of these particular scenarios was most relevant for Scotland.[178]

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173 Ibid., p. 197, Tab. 37.
174 Ibid., p. 198.
175 Ibid., p. 161.
176 Chapter 2, section 2.2.4 above.
177 The Germans became coffee and the Austrians chocolate drinkers subsequently; in fairly much the same way as the English developed a taste for tea and abolished traces of a preference for coffee in the 1730s. R. Sandgruber, "Genußmittel. Ihre reale und symbolische Bedeutung im neuzeitlichen Europa," *JbfWG* (1994/1), pp. 73-88, p. 77, and references to further literature; W. Abel, *Stufen der Ernährung. Eine historische Skizze* (Göttingen, 1981); W. Schivelbusch, *Das Paradies, der Geschmack und die Vernunft. Eine Geschichte der Genußmittel* (Munich - Vienna, 2nd ed., 1981); J. Schneider, "Produktion, Handel und Konsum von Kaffee (15. bis Ende 18. Jh.)" in H. Pohl (ed.), *The European Discovery of the World and its Economic Effects on Pre-industrial Society 1500-1800* (Stuttgart, 1990), pp. 122-140; S. W. Mintz, *Sweetness and Power. The Place of Sugar in Modern History* (New York, 1985); H. Pietschmann, "Produkte und Techniken aus Übersee in den Europäischen Ökonomien, 12.-18. Jahrhundert: Nahrungsmittel in Westeuropa. Ein Forschungsbericht" in S. Cavaciocchi (ed.), *Prodotti e Tecniche d'Oltremare*

Thus the silence of Scottish records must not be taken as evidence for a low relevance of tea trading and consumption in eighteenth century Scotland *per se*. But a thorough examination of eighteenth-century Scottish (luxury) consumption patterns is still wanting and therefore a more comprehensive discussion needs to be postponed for the moment. Only some impressionistic remarks may be made on the outset.

Tea drinking had been introduced to Scotland as a curiosity of the richer classes towards the end of the seventeenth century. Coming from the Dutch East India Company, it had been given to the conservator of the Scottish staple at (Camp)Veere as a gift.[179] A century later the Old Statistical Account (1791-1799) already reported about tea drinking in more than 110 locations all across Scotland, even reaching the Orkneys and Shetlands, suggesting a fairly recent trend towards consumption on a grand scale across all strata of society. These reports are unanimous about a rapid increase and spread of tea drinking to the labouring classes in Scotland *after* 1760, suggesting that prior to that date tea had remained a luxury item.[180] Smout and

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nelle Economie Europee Secc. XIII-XVIII (Prato, 1998), pp. 175-204, at p. 184f.; J. Schneider, "Die neuen Getränke: Schokolade, Kaffee und Tee (16.-18. Jahrhundert)" in Ibid., pp. 541-590; C. Shammas, "The Revolutionary Impact of European Demand for Tropical Goods" in J. J. McCusker and K. Morgan (eds.), *The Early Modern Atlantic Economy* (Cambridge, 2000), pp. 163-185.

178 This is due largely to the fact that no social or economic history of consumption in eighteenth century Scotland exists.

179 Sir John Sinclair (ed.), *The Statistical Account of Scotland* [...] (Edinburgh, 21 Vols., 1791-1799), Vol. 12, p. 41. Henceforth referred to as *OSA*.

180 *OSA*, Vol. 1, p. 87 (Ayton, County of Berwick); Vol. 1, p. 234 (Dalmeny, County of Linlithgow); Vol. 1, p. 336 (Biggar, County of Lanark); Vol. 1, p. 345 (Yester, County of Haddington); Vol. 1, p. 355 (Bathgate, County of Linlithgow); Vol. 1, p. 386 (Shetland); Vol. 2, p. 20 (Dornock, County of Dumfries); Vol. 2, p. 113 (Mauchline, Ayrshire); Vol. 2, p. 130 (New Abbey, County of Kincardine); Vol. 3, p. 449 (Bonhill, County of Dumbarton); Vol. 3, p. 465 (Dalziel, County of Lanark); Vol. 4, p. 17, p. 20 (Lethnot & Navar, County of Forfar); Vol. 5, p. 17 (Elgin); Vol. 5, p. 193 (Shetland); Vol. 5, p. 227 (Mains of Fintry, County of Forfar, reference to teakettles); Vol. 5, p. 253 (Cambuslang, County of Lanark); Vol. 5, p. 325, p. 328 (Currie, County of Edinburgh); Vol. 5, p. 393 (Ceres, County of Fife); Vol. 6, p. 126 (Monquhitter, County of Aberdeen); Vol. 6, p. 226 (Tarland, County of Aberdeen); Vol. 6, p. 516f. (Forfar); Vol. 6, p. 558 (Wandell and Lammingtoune, County of Lanark); Vol. 6, p. 609 (Edinburgh); Vol. 7, p. 134 (Stow, County of Edinburgh); Vol. 7, p. 582, p. 588f., p. 596f. (Shetland); Vol. 8, p. 220, p. 222 (Dundee); Vol. 9, p. 50 (Logie Pert, County of Forfar); Vol. 9, p. 115 (Birse, County of Aberdeen); Vol. 9, p. 148 (Abernyte, County of Perth); Vol. 9, p. 236, p. 239 (Clunie, Countie of Perth); Vol. 9, p. 388, p. 391 (Avondale, County of Lanark); Vol. 9, p. 415 (Kirknewton, County of Edinburgh); Vol. 9, p. 520, p. 527 (Graitney, County of Dumfries); Vol. 9, p. 589, p. 594 (Crief, County of Perth); Vol. 9, p. 629 (Inverness); Vol. 10, p. 108 (Edzell, County of Forfar); Vol. 10, p. 201 (Shetland); Vol. 10, p. 432 (Penicuik, County of Edinburgh); Vol. 10, p. 498 (Kirkoswald, Ayrshire); Vol. 10, p. 559; Vol. 10, p. 589, p. 591 (Kelso, County of Roxburgh,

Gibson's verdict follows this: "[T]ea drinking did not become general until late in the nineteenth century[.]"[181] Whatley on the other hand cites contemporary references to Musselburgh "blue collar workers" ("blue gowns and fish carriers") drinking tea on a regular basis or in comparatively large quantities much earlier in the century (1740s).[182] Customs evidence confirms that as early as the middle of the century Scottish ships bound for the Greenland fisheries occasionally took tea, as well as coffee, with them amongst their provisions.[183] There is therefore ample scope for further research and debate on the issue from the point of the cultural and social historian, as well as the historical sociologist.[184]

Notwithstanding these diverging opinions, 1700-1760, the time framework chosen for the present analysis again appears to be a sensible reference framework for a discussion of the Scottish tea trades. Within this period tea appears to have been an item of much larger significance in Scottish trade (and consumption) patterns than hitherto appreciated. Transport costs and the monopolistic position of the London-based East India Company increased the price for British legal tea beyond feasible

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reference to teakettles); Vol. 11, p. 156f. (Kilwinning, Ayrshire); Vol. 11, p. 288 (Kidalton, County of Argyll); Vol. 11, p. 403 (King Edward, County of Aberdeen); Vol. 12, p. 41 (Pettinain, Lanarkshire); Vol. 12, p. 48 (Coldingham, County of Berwick); Vol. 12, p. 55 (Coldingham, County of Berwick); Vol. 12, p. 184 (St Vigeans, County of Forfar); Vol. 12, p. 194 (Kirrimuir, County of Forfar); Vol. 12, p. 469 (Kirkmichael, County of Banff); Vol. 13, p. 165 (Murroes, County of Forfar); Vol. 13, p. 290 (Shetland); Vol. 13, p. 560 (Lochcarron, County of Ross & Cromarty); Vol. 14, p. 326 (Orkney); Vol. 14, p. 363 (Calder Mid, County of Edinburgh); Vol. 14, p. 482 (Wigton); Vol. 15, p. 92 (Twynholm, County of Kirkcudbright); Vol. 15, p. 239f. (Benholme, County of Kincardine); Vol. 15, p. 495 (Kilbarchan, County of Renfrew); Vol. 16, p. 295 (Whithorn, County of Wigton, reference to teakettles); Vol. 16, p. 372 (Peterculter, County of Aberdeen); Vol. 16, p. 448 (Orkney); Vol. 16, p. 479 (Deer, County of Aberdeen); Vol. 16, p. 607, p. 611, p. 613, p. 619, p. 626 (Peterhead, County of Aberdeen); Vol. 17, p. 4, p. 12 (Coupar Angus, County of Perth); Vol. 17, p. 44 (Pencaitland, County of Haddington); Vol. 17, p. 141, p. 146 (Cupar, County of Fife, reference to tearoom); Vol. 17, p. 289 (Small Isles, County of Inverness); Vol. 17, p. 438 (Mortlach, County of Banff); Vol. 17, p. 450 (Forres, County of Elgin); Vol. 18, p. 44f. (Kirkcaldy, County of Fife); Vol. 18, p. 121 (Garunnock, County of Stirling); Vol. 18, p. 179 (Carstairs, County of Lanark); Vol. 18, p. 308f. (Kilsyth, County of Stirling); Vol. 20, p. 226 (Duke & Moy, County of Elgin); Vol. 20, p. 480 (Dowally, County of Perth);

181 Gibson & Smout, *Prices*, p. 234, p. 340.

182 Whatley, *Society*, p. 75.

183 E.g. customs accounts: *Aberdeen*, NAS, E504/1/6, General Goods Exported Nr. 58 (Victualling Bill) for the *City of Aberdeen*; entry Nr. 59 for the *St Anns of Aberdeen*, likewise bound for Greenland. The City of Aberdeen was manned with 41 men and took as provisions *inter alia* three lbs *tea* and three lbs of *coffee*. The St Anns was manned with a crew of 50, but an identical amount of tea and coffee was declared in her victualling bill. For that size of crew, these amounts of tea and coffee were fairly generous.

184 The model study for England and America in this field is: C. Shammas, *The Pre-industrial Consumer in England and America* (Oxford, 1990).

market price levels for all but the most affluent members of society. Accordingly, in Scotland turns were taken to look for a cheaper supply elsewhere. Scotland's tea was supplied initially mainly via Holland and since the beginning of the 1730s, increasingly via Sweden (Gothenburg). That Swedish tea was treated preferentially is explainable by a variety of reasons. (a) The apparently high quality differentials between Dutch and Swedish tea might have played a role, even though the Dutch EIC in the early eighteenth century were at pains to increase their total turnover and profits by radically lowering their prices and accordingly their profit margin on tea.[185] (b) That the Scots should come in contact with and draw their main supplies of tea from Sweden was furthermore not a matter of question but to an extent merely a matter of time. The Swedish EIC was founded in 1731. The return route favoured by the Swedish East Indiamen on their voyage from China to Gothenburg normally passed by the north tip of Scotland, Shetland and the Orkneys[186], where ships were frequently wrecked. In 1744 for instance, the Swedish East Indiaman *Suecia of Gothenburg* was wrecked offshore the Orkneys. The natives did not hesitate to help themselves to a generous supply of free tea.[187] (c) Perhaps the most important factor however, was that the Swedish company was co-founded and partly run by Scotsmen with a profound interest in "free trading", i.e. sidelining the big monopolists in the India trades, mainly the English and Dutch East India Companies.

In fact the shift in Scottish markets for illegal tea from the Netherlands to Sweden as Scotland's main supplier circa 1730 was co-determined by the patterns and chronology of the foundation and abolition of some continental Asian and East India Companies that had been established in competition with the two monopolists at the time (the Dutch and the English EIC). Prior to 1731, Scotland relied mainly on illegal supplies from the Dutch EIC. Contemporaries held that the most common form of importing the item was to procure it in ships from Holland, where the tea was concealed amongst "Matts of Flax [*and*] Casks of Hayseed".[188] Indeed, whilst

185 Mui & Mui, "Smuggling," p. 48, p. 50.
186 S. T. Kjellberg, *Svenska Ostindiska Compagnierna 1731-1813. Kryddor-Te-Porslin-Siden* (Malmö, 1974), p. 59.
187 NAS, AC9/1604, *Swedish East India Company vs. Earl of Morton*, 1744, 11 items relating to the claim of the Swedish EIC to return the cargo to its legitimate owners.
188 NAS, CE 60/2/359, deposited in GCA, Mitchell Library, *Port Glasgow and Greenock, Board of Customs to Collector*, Order and Letter Book, Surveyor's Copy (?), 19 August 1768.

only incompletely preserved, the early eighteenth-century seizures accounts of the Scottish Board of Customs in all cases where a reference as to the ships' and seized good's provenience was made, refer to the port of origin exclusively as either "Rotterdam" or "the Netherlands" (see table 19 below).[189]

After 1723 the running of tea or successful detection of the latter seems to have crystallized around Aberdeen and Dumfries. The latter district and customs precinct was renown for its flourishing tea (and brandy) running business in the early decades of the eighteenth century.[190]

Table 19: Seizures of Tea in Scotland, 1722-1728 (lbs)

Customs Seizures Accounts: NAS, E369/6, E369/8/5, E369/8/13, E369/8/27, E369/8/34, E369/10/1 (2nd ser.), E369/10/21, E369/10/23, E369/14/12.

	1722		**1723**		**1724**		**1726**		**1728**	
	lbs	%	lbs	%	lbs	%	lbs	%	lbs	%
Aberdeen			17	100%	5	19%	136	86%		
Alloa	3	1%								
Anstruther							23	14%	141	100%
Bo'ness	39	17%								
Dumfries					21	81%				
Dundee	4	2%								
Edinburgh/Leith	113.5	49%								
Kirkcaldy	45	19%								
Montrose	6	3%								

Once the Swedish East India Company was established, however (1731), Scotland turned to Gothenburg for better and perhaps cheaper supplies. In 1785 a politician wrote in retrospective that

> [t]he East India Company have not been at sufficient pains to supply Scotland with this article, nor could it have been afforded at a moderate price till the Duties were lowered. Consequently the whole consumpt of Scotland, or nearly so, has been smuggled, by which the country has been drained of about £200,000 in hard cash annually to Gottenburg.[191]

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189 Out of a total of 37 filed seizures, 18 cases particularly indicated "Holland" or "Rotterdam" as the cargoes' origin; two gave Bimblefure and "Norway and Rotterdam". In nine cases the tea had been seized from private homes in Scotland, and in eight cases no place of origin or seizure was given. Customs Seizures Accounts: NAS, E369/6, E369/8/5, E369/8/13, E369/8/27, E369/8/34, E369/10/1 (2nd ser.), E369/10/21, E369/10/23, E369/14/12.

190 Cf. also present chapter, section 4.3.2.1.2 above.

191 NAS, GD 51/3/194/1-2.

This was no coincidence. The establishment of the Danish Asiatic Company (1732-1777)[192] and the Swedish East India Company (1731-1813), which both engaged in roughly the same field of commercial activity as the Dutch and English companies, followed in the wake of the abortion of the *French* (1664-1716), the *Austrian* and *Portuguese* East India Companies (Table 20). [193]

Table 20: Foundation and Abortion of East India Companies of the Several European States, 1600-1818

Adapted from Mieck, "Wirtschaft und Gesellschaft," p. 55f., Tab. 55

State	Founded	Aborted
Brandenburg-Prussia	1750	1788
Denmark-Norway	1732	1777
England	1599	1858
France	1604	1611
	1664	1716
Netherlands	1602	1800
Austria (Ostend)	1722	1731
Portugal	1722	1731
Sweden	1731	1813

The two Scandinavian companies were the only serious commercial rivals of the two big monopolists until 1750, when the – small and largely unsuccessful – Brandenburg-Prussian East India Company in Emden was established.[194] Particularly the Gothenburg company followed in the wake of the recently aborted Ostend East India Company, in which Scotsmen had already had a stake.[195] Unsurprisingly Colin Campbell, a Scot, who had been an employee of the abortive Ostend Company, also became supercargo on the first voyage commissioned by the Swedish East India

192 K. Glamann, "The Danish Asiatic Company, 1732-1772," *ScandEcHR*, VIII, 1 (1960), pp. 109-149.

193 I. Mieck, "Wirtschaft und Gesellschaft Europas von 1650 bis 1850" in Fischer, Van Houtte, Kellenbenz, Mieck & Vittinghoff (eds.), *Handbuch*, Vol. 4, pp. 1-234, at p. 55f., Tab. 55.

194 M. North, "Von der Atlantischen Handelsexpansion bis zu den Agrarreformen (1450-1815)" in Id. (ed.), *Deutsche Wirtschaftsgeschichte. Ein Jahrtausend im Überblick* (Munich, 2nd ed., 2005), pp. 112-196, at p. 183.

195 The Ostend Company had been open to anyone interested in breaking the monopoly of the two big players. Schultz, *Handwerker, Kaufleute und Bankiers*, p. 154f.

Company to Asia in 1731. During the time of its existence (1731-1818) the Gothenburg EIC commissioned a total of 132 voyages to China and India. Together with the Danish company it accounted for up to 35 per cent of total tea supplies at times to the European (re-export) market.[196] This was by no means a marginal business, even though the English EIC never lost her dominant market position.

Thus there can be no doubt that between 1731 and 1784 the Swedish East India Company was Scotland's main source for tea. This pattern was mainly a question of prices quoted to the consumer. To the Scots, who could not set up an East India Company on their own legally after 1707 and whose own East India (Darien) Company had failed at the eve of Union, "interloping" by relying on the newly emerged rivals of the English company was a logical step forward in 1731, after having drawn their main supply from the other non-British monopolist before. Partly this reflected the need of an under-developed economy for cheaply priced items in which the legal channel – the London East India Company – clearly failed to deliver.

Whilst tea could yield different prices according to different brands and quality, average prices quoted for Dutch or Swedish tea in Scotland were decidedly lower than for English (i.e. legal) tea coming from London, although both tended to decline in the long run (1730s-1770s).[197] In the second half of the 1740s for instance, English EIC tea fetched a bid-up auction price of on average 43.5d per lb, exclusive of profit and excise duty, the latter after 1745 amounting to 1s plus 25 per cent *ad valorem*. Under normal conditions this would have increased the retail price to levels of at least 6s per lb *in England* on top of which freight charges would have to be

196 L. Müller, "The Swedish East India Trade and International Markets: Re-exports of Teas 1731-1813," *ScandEcHR*, LI, 3 (2003), pp. 28-44, esp. p. 31f., p. 34f.; Id., "Scottish and Irish Entrepreneurs in Eighteenth-Century Sweden. East India Trade and Iron," (Unpubl. Paper, Uppsala, 2003), p. 3f. L. Magnusson, *An Economic History of Sweden* (London - New York, 2000), p. 88-90. T. Fischer, *The Scots in Sweden* (Edinburgh, 1907), p. 16f. The influx of Scots exiles into Sweden in the early period increased with the two Jacobite Rebellions in 1715 and 1745/6. Many of those Scots would have had some profound commercial interests that were at variance with English mercantile law. Even though the running of the Gothenburg Company was by law reserved to Swedish denizens, resident Scots continued to retain large shares in this company's investment capital and business turnover after 1730. I should like to express my gratitude to Prof Leos Müller, University of Uppsala, for pointing out to me several important aspects of Scottish supply with Swedish tea, as well as for providing copies of two unpublished papers via email.

197 Mui & Mui, "Smuggling," p. 53, Tab II, p. 54f.

added if the tea was to be sent from London to Scotland.[198] Thirty years on, legal tea (i.e. supplied via the English EIC) would have cost about 7s to 7s 6d per lb in *Scotland*, again exclusive of about 1d to 1d 2 *farthings* freight charges.[199] The factual price level in Scotland was decidedly lower, which argues in favour of an already large and quite impressive "free" market for tea in Scotland, 1740-1780. Available sources unanimously give lower retail prices than quoted for London tea. In *Montrose* for instance, Thomas Douglas (in company with William Duncan) in 1741/2 purchased 5 cwt of tea from Gothenburg for £80 Sterling. At an average price of between 2s 10 1 farthing and 2s 10d 2 farthing per lb[200], this would have translated into a wholesaler's price to be quoted by Douglas to his customers (disregarding the possibility that Douglas was involved in the retail trades) far below possible prices for legal (i.e. London-EIC) tea. Even if this price were doubled in order to arrive at a retailer's price, thus including a very generous mark-up, a price of 5s per lb would have been decidedly lower than the price that would have to be quoted for English EIC tea in the early 1740s (> 6s per lb exclusive of freight charges, see above). A few years later, in 1744, Bailie John Steuart, an overseas merchant (dealing mainly in grain and fish) active in and based at *Inverness*, noted that

> [a]s to the Tea, no body here would look at it at your price, besides, I think your hoysong is much decayed in the flavour, so have returned that two pounds per bearer. And for the other two pounds of Congoe Tea, it was used in my Family, but I doe not think it worth above 6/ sh. pr. Lb.; and I can buy as good Tea any day I please for less money, as there is great quantityes to be had here of exceeding good bohea Tea under 5/ sh. per Lb.[201]

The customs collector at *Port Glasgow* stated in 1750 that seized tea

198 Given that prior to 1745, English legal tea paid a much higher excise duty of 4s per lb, prices were accordingly higher in the early 1740s.
199 NAS, GD51/3/194/1-2, p. 2f.
200 NAS, RH15/38/67, *Libel against Thomas Douglas*. A ratio of 112 lb = 1cwt has been assumed.
201 Mackay (ed.), *Letter-Book*, p. 443 (Letter to Patrick Urquhart, 2 March 1744).

> will not sell in this Coastside Excepting it was to be put up at 3/4^{d} p. pound and in that case we don't think it would fetch much more for the Countrie is Chiefly Supply'ed with Smugled Tea."[202]

This tea was at least 3d 2 farthings per lb cheaper than the comparable English item[203], disregarding a factually much higher differential due to applicable freight charges for the transportation of English tea to Scotland, which would have increased the price up to 5d per lb. Such examples could certainly be multiplied for each decade falling in-between 1730 and 1780. Clearly, the market cleared at lower prices in Scotland. Without doubt the business was booming in the 1740s, even leaving quantities for re-export to England (see following paragraphs). Accordingly English tea could not have fetched a large market north of the border, as there is absolutely no indication that in Scotland illegal supply channels (Holland, Sweden) would have made for inferior quality of the tea sold in Scotland. Nothing can be said at present about the variations of prices (a) across Scotland in general, (b) according to differences in terms of quality and brand, or (c) over time, as well as (d) the relation of wholesale to retail prices in Scotland in the period under consideration. Nevertheless the above quotations are unambiguous in suggesting that tea trading and consumption was already a perfectly normal habit for large groups of society.

This is also borne out by some non-quantitative accounts. From their first issues (1739) onwards, both the *Scots Magazine* and the *Caledonian Mercury* reported quarterly about cargoes of interest that had been landed at Leith. Tea appears as a regular item. According to the *Caledonian Mercury* of 4 December 1739 for instance, there were 3,049 lbs of *Bohea* and 402 lbs of *Green* tea stored in the King's Warehouse at Leith.[204] In the same month, a further 3,291 lbs were explicitly

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202 NAS, CE60/1/1, 8 March 1750.

203 If the price quote of the Glaswegian Customs collector is compared to the English wholesale price, both of which are exclusive of excise duty. In the 1750s the wholesale price for English tea exclusive of excise duty amounted to circa 3s 7d 2 farthings.

204 *Caledonian Mercury*, 4 December 1739.

reported as having come there from Gothenburg[205], which appears to have become the main source of supply.

Obviously all these cargoes had been seized. The mechanism of supply was simple. On the one hand there was straight smuggling which obviously is largely elusive. On the other hand reported seizures, referring to detected smuggling, seem to suggest the existence of a sophisticated system of supply chains, which operated under an ever-increasing level of efficiency and business scale. These reported seizures certainly only captured the tip of the iceberg. Any time a cargo of tea was seized by Customs officials without a merchant claiming the cargo[206], it was put up for auction by the customs collector at the customhouse in the respective port and sold to the highest bidder. The latter, who quite often was the person who had originally commissioned the cargo and abandoned it after it had been detected by the customs officials, had to pay all applicable fines and excise duties, after which the tea was deemed "legal". To the Scots, wholesalers and consumers alike, even this seemingly tedious and expensive procedure of obtaining legal tea still paid off. The alternative would have to be the – in this framework highly hypothetical – *correct* way of obtaining tea from London, i.e. at EIC auctions, and much higher purchase prices. Even seized tea could be offered within Scotland at prices lower than legal (London) tea whilst still yielding a reasonable profit margin to the wholesaler.

At some point this illegal system of the Scottish supply via the Swedish EIC was so well developed as to lead to the unlikely (but in the market context logical) situation of Edinburgh supplying London with tea. According to the *Scots Magazine* for instance 1,222 lbs of (seized) tea were shipped from Leith to London in January 1740.[207] 1,540 lbs of tea were shipped out from Leith to London between June and July 1740, and a further 4,837 lbs between 25 December 1740 and April 1741.[208] Those newspaper entries are but a random sample taken from the early 1740s.[209]

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205 Ibid., 20 December 1739. Cf. a cargo of 1,919 lbs Bohea and 556 lbs green tea shipped from Aberdeen to Dunkirk in Ladyday 1754. This tea had likewise been obtained from Gothenburg. NAS, E504/1/5, I/1754, Goods Exported, Nr. 28.

206 Anyone doing so would have fallen foul of official regulations.

207 *Scots Magazine*, January 1740, p. 46.

208 Ibid., July 1740, p. 338; April 1741, p. 190.

209 A more thorough examination of the newspapers, Customs (seizures) records and related material preserved in the records of the Scottish Exchequer and Court of Sessions would be extremely desirable in order to reconstruct the Scottish tea market c.1740-1780.

This increasingly well-organized supply pattern might also have translated into a growing permeation of tea consumption down the strata of Scottish society. The above-quoted information on quarterly seizures represented valuable information on markets and prices of an item the consumption of which had become vital for the readers of these newspapers. An increased awareness of the middle and upper classes on the moral and immoralities of tea drinking (until recently a rather uncommon habit amongst Scots), was also apparent, reflected for instance in an ongoing intellectual debate in the *Scots Magazine* in 1744. This intellectual debate obviously had its roots in a profound concern about the stability of the prevailing social stratification schemes, which did not include the notion of the lower classes in indulging in exotic non-essentials day by day. This would have deprived the upper strata of one of their most favourite means to socially distinguish themselves from the lower strata of society. Whether or not this debate covered a process that was imminent, under the way, or already irreversible, needs to be left open to further historical and sociological research. Towards the end of the period under consideration on the other hand the source material is slightly less ambiguous and supports the views expressed by the reporters of the First Statistical Account. Around 1780, politically motivated contemporaries quoted the yearly supply of Scotland with smuggled tea at 1.2 million lbs that came from Gothenburg alone.[210] Disregarding re-exports, this supply alone would in fact have been large enough for Scotland to enjoy per capita consumption levels of tea similar to those obtaining for England, i.e. tea might have been "mass-consumed" in the 1780s.[211]

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210 NAS, GD51/3/194/1-2.

211 Ibid. Much of this arithmetic however, was motivated by political interest and thus the figures used might be fictitious. This document for instance reports that around 1788, 300 lbs of tea were consumed in Glasgow each day. Several possible scenarios obtain. (1) In eighteenth century England, admittedly the leader in early modern European tea consumption, one lb of green tea is thought to have been sufficient in order for one person to drink tea for a year on a regular, very probably daily, basis. Thus one lb of tea would have been sufficient for 365 tea drinkers per day in a given place. Therefore, 300 lbs of green tea consumed in Glasgow would have been enough to provide for 365*300 = 109,500 people on a daily basis. (2) If the consumption requirements are increased by 100 per cent to a generous 2 lbs per capita per year, thus adopting the figure suggested by Shammas, the result would still be 54,750 regular daily tea drinkers. At that time (c.1780) this would have equalled the entire population of Glasgow, which in 1795 counted 61,945 inhabitants. (3) Assuming that a regular tea drinker consumes 3 lbs per annum, those quoted 300 lbs would have been enough for 365/3*300 = 36,500 regular tea drinkers. F. Braudel, *The Structures of Everyday Life.* Vol 1. *Civilization and Capitalism 15th – 18th Century* (London, 2002, pbk), p. 251f.; Shammas, *Consumer*, p. 78, p. 84, Tab. 4.4.

In conclusion to this section it can be noted that the market for illegal tea was already booming in Scotland by the early 1740s. Without doubt it had attained large dimensions by the mid-1750s. Therefore, actively participating in the Gothenburg venture after 1731 was as illegal (from the point of view of British authorities) as it was profitable for the Scots, since the Swedish EIC rapidly increased their turnover and supply after its foundation. The tea trades however differed from the early eighteenth-century Scottish *tobacco* trades mainly by the fact that Scots merchants resident in Scotland never sailed directly to China and sometimes not even as far as Gothenburg. Nevertheless, in the same way as in the early tobacco trades, c. 1700-1740, the initial basis for the Scots' successful participation in the trades of non-European non-essentials had its roots in an entirely illegal form of commercial activity. The implications of this in a *British* perspective have as yet largely been under-appreciated. Even though in terms of volume and value, tea trading certainly never reached the dimensions of the Glaswegian tobacco trades, "free trading" in tea, c. 1730-1770 became one important mainstay of Scottish illicit commercial activity. It did so in the same way as smuggling had become the essential foundation for the sustained growth in the tobacco trades slightly earlier on (esp. 1680-1730). "Interloping" or "free trading" provided one of the mainstays for commercial expansion in the overseas trades. These aspects also underline the role of the smuggler in Scotland's society and the informal or "black market" sector in what was still a pre-industrial society and economy, neither able nor willing to catch up with the consumption, trading patterns and terms of taxation of her richer neighbour to the south.

The structure and argument of the present chapter will now (chapter 5) be carried further towards the end of the 1750s, drawing on a range of more detailed and comprehensive quantitative sources, and taking into consideration Scotland's *balance of trade*, rather than trade in singular commodities.

5 The Scottish Pattern of Trade towards the End of the Period (1755/59)

This chapter provides a concise overview on the Scottish trade pattern at the end of the period under consideration, as from 1755 onwards, trade statistics are available, allowing a comprehensive examination of Scotland's "balance of trade", as well as a detailed breakdown of the trade volume by countries and commodities. The discussion will highlight (a) commodity imports, exports and re-exports, (b) countries Scotland traded with, as well as (c) ports involved in the trades on the Scottish and the (d) foreign side. Since a very general and non-statistical account can also be found in Hamilton[1], and the tobacco trades, which by their sheer size dominated and to an extent determined the cyclical pattern of Scotland's gross total overseas trade, have been studied in detail elsewhere[2], the following discussion will be limited to what has not been covered by previous studies.[3] New evidence from previously un- and under-utilized sources will be presented, chiefly on the outport level, in order to deepen our existing, yet very general knowledge on regional patterns and structures of mid-eighteenth-century Scottish overseas trade. The present chapter thus provides the framework for the analysis of trade's role for the economy (chapter 6), which closes the discussion in Part I of the present thesis. It will also provide the reference framework for Part II, in which trade with the German Empire on the statistical or macro-[4], as well as the "micro-level" (individual merchants' trading patterns) will be analyzed.[5]

In 1760 Scotland was still essentially a pre-industrial, and, relative to England and the Netherlands, under-developed economy. This stage of economic development was reflected in an accordingly rather low degree of openness, i.e. a low exports-to-GDP share and tiny per capita gross total trade levels, as well as a characteristic composition of the trade volume. Commerce was geared towards

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1 H. Hamilton, *An Economic History of Scotland in the Eighteenth Century* (Oxford, 1963), ch. IX.
2 See references to the literature in ch. 4, section 4.3.2.1.1
3 See general discussion of the available literature in ch. 1.
4 Ch. 7.
5 Ch. 8.

"warehousing", i.e. dominated by commodities that were imported in order to be re-exported without any or much further processing. In volumetric terms such commodities – tobacco, sugar, rice and linens – normally accounted for more than 50 per cent of either imports or total exports. Domestic exports were dominated by primary and semi-processed goods. The only manufactured domestic exports of significance were coarse linen and woollen cloth (incl. stockings). Products of the domestic economy were – with the exception of linen textiles – not normally traded in significant amounts, relative to production levels, as well as their share in total domestic exports.

Thus a detailed analysis of the Scottish trade volume would clearly exceed the limits of the reasonable and necessary within the present work. Only significant trends and aspects will be discussed. For a detailed break-down of the commodity trade the reader is referred to the statistical appendices (B1-11) to this volume.

5.1 The Composition of the Scottish Trade Volume

5.1.1 Exports

The following table allows a quick glance at the composition of the Scottish export volume, 1755-59.

Table 1: The Scottish Export Volume, 1755-59

TNA, Customs 14. Figures are averages for five years, 1755-1759, based on not entirely volumetric £Sterling valuations. Figures for England, 1752-1754 calculated from R. Davis, "English Foreign Trade, 1700-1774," in: *EcHR*, Second Series, XV (1962) pp. 285-303. Zero values indicate existing traffic yielding a figure below .5 per cent

Commodities: Main Classes	Comm. : Sub-Classes	Domestic Exports	% of domestic exports	Re-exports	% of re-exports	Total Exports	% of total exports	% of total exports, England (1752-4)
Grocery, Beverages	Tobacco	£365	0%	£319,435	78%	£319,800	42%	8%
	Sugar	£2,560	1%	£22,293	5%	£24,853	3%	1%
Total Grocery		*£3,324*	1%	*£343,499*	84%	£346,823	46%	
Textile Inputs		£4,311	1%	£1,504	0%	£5,815	1%	
Textile Manufact.	Narrow German			£17,987	4%	£17,987	2%	
	Plain Scotch	£66,415	19%			£66,415	9%	
	Plain Irish		0%	£21,698	5%	£21,698	3%	
	Handkerchiefs	£32,709	9%			£32,709	4%	
	Sailcloth	£3,749	1%			£3,749	0%	
total Linen		£121,245	35%	£45,164	11%	£166,408	22%	2%
	Woollens	£53,003	15%			£53,003	7%	33%
	Haberdashery	£10,482	3%			£10,482	1%	
Total textiles		*£198,183*	57%	*£45,811*	11%	£243,994	32%	*46%*
Grain		£6,213	2%	£12,547	3%	£18,760	2%	8%
Base Metals	Lead	£48,934	14%			£48,934	6%	1%
	Iron Manufact.	£8,964	3%	£649	0%	£9,613	1%	
Minerals: Coal		£6,002	2%			£6,002	1%	1%
Fish	Herring	£27,639	8%			£27,639	4%	
	Salmon	£21,126	6%			£21,126	3%	
	Cod & Ling	£5,539	2%			£5,539	1%	
Total Fish		£54,304	16%			£54,304	7%	1%
Leather Manufact.		£12,572	4%			£12,572	2%	
Other		£3,375	1%	£3,895	1%	£7,270	1%	
Total		£346,183	100%	£407,904	100%	£754,087	100%	

Woollens: includes thread stockings

5.1.1.1 Domestic Exports

Domestic exports were dominated by textile manufactures, bar lead and fish. Amongst textiles, linen manufactures, mainly plain Scotch linens and handkerchiefs, were the main group of commodities exported, accounting for a total of 35 per cent of domestic exports.

Linens[6] chiefly went to the Caribbean and North America. These were the only foreign market of significance for this product. A Mercantilist framework of protection and taxation – bounties on Scottish (as well as English and Irish) exported production and high tariffs on retained imports of German (the main competitor) linens – secured an artificially large overseas market for what otherwise would have been a largely uncompetitive product. With an export share of up to 20 per cent and more of total output towards the middle of the eighteenth century (which almost exclusively went to the Americas), Scotland's leading industry was heavily reliant on exports. As linen exports as such, as well as the increase in the export share after c.1740, were almost exclusively absorbed by the English colonies overseas, a significantly high share of economic expansion of this industry would have been foregone had this institutional framework not existed. This becomes especially evident from the fact that an expansion of absolute production levels over the period went ahead with an increase in the export share for Scotch linens. Exports grew faster than absolute production (marketed output) levels, c. 1730-1770.[7] Whenever bounties on linen exports were temporarily removed on the other hand, the market shares of imported (and re-exported) German linens increased.[8] Without the application of the Mercantilist framework therefore, eighteenth-century Scottish production levels might thus have been lower by one-fifth or even one-fourth. Clearly the industry would not have sustained such a trajectory of dynamic expansion in the long run.

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6 For markets and export shares, see A. J. Durie, "The Markets for Scottish Linen, 1730-1775," in: *SHR*, LII, 1 (1973), pp. 30-49; Id., *The Scottish Linen Industry in the Eighteenth Century* (Edinburgh, 1979). Output figures given in: R. H. Campbell (ed.), *States of the Annual Progress of the Linen Manufacture 1727-1754. From the Records of the Board of Trustees for Manufactures etc., in Scotland Preserved in the Scottish Record Office* (Edinburgh, 1964).

7 Durie, "Markets," p. 38.

8 See sections on Scottish-German trade, ch. 7.

Table 2: Destinations for Exports of Domestic Linen (Totals, 1755-59)

TNA, Customs 14

Destination	Type of Cloth	Sterling	%
America	Plain Scotch Linen	325474	54%
	Handkerchiefs	119093	20%
	Printed Linen	33416	6%
	Lawns	6918	1%
	Sailcloth	18658	3%
	Other	13951	2%
	Totals	*517510*	*85%*
Ireland	Kentings	76180	13%
	Plain Scotch Linen	1712	0.28%
	Handkerchiefs	1683	0.28%
	Totals	*80087*	*13%*
Spain		5014	1%
Other		3771	1%

Thus the American market was of paramount importance. Exports to Ireland were, as the customs accounts suggest, not usually sold there but rather processed (bleached), prior to their being re-imported into Scottish ports.[9]

Woollen manufactures were exported from Scotland in not insignificant quantities as well. In this market, competition from English woollen producers, which would have kept the Scottish export market at a suboptimal size, was generally acknowledged to be harsh and widely lamented upon by contemporaries. If exported from Scotland, Scottish woollen manufactures mainly went to the Netherlands, the last continental market for this Scottish product of significance. Some quantities also went to the Americas and the German Empire. Exports consisted mainly of stockings and cloth declared under the lump sum heading "woollendries" by measure (yd) and weight (cwt) in the customs accounts (and aggregated accordingly in the statistics).

9 NAS, E504, *passim*. L. A. Cochran, *Scottish Trade with Ireland in the Eighteenth Century* (Edinburgh, 1985), p. 58f. (domestic exports to Ireland); pp. 133-136 (imports from Ireland).

Table 3: Markets for Scottish Woollen Manufactures (Totals, 1755-59)

TNA, Customs 14

Destination	Type of Cloth	Sterling	% of Total
Holland	Woollendries	27,217	11%
	Worsted Stockings	110,236	45%
	Totals	*138,258*	*57%*
America	Woollendries	88,491	36%
	Worsted Stockings	7,996	3%
	Totals	*98,418*	*40%*
Germany	Worsted Stockings	4,470	2%
	Totals	*4,471*	2%
Other		1,993	1%
Total		243,140	100%

Without doubt Scottish woollen production was a predominantly domestic and ruralized industry in the later seventeenth century already.[10] There was only a brief interval between 1680 and 1710, when a number of Scottish woollen manufactories were established. These, however, usually went bankrupt and had to be abolished, rendering this most advanced method of production unsuitable for Scotland for a further 100 years. Subsequently the Scottish industry focused on decentralized forms of production.[11] Generalized explanations for a comparative disadvantage of Scottish woollen producers put forward the "productivity trap", from which most other European economies suffered as well:

10 B. Lenman, *An Economic and Social History of Modern Scotland 1660-1976* (London, 1976), p. 71. Theoretical approaches to "proto-industry" – probably the best heuristic framework for the eighteenth-century Scottish woollen (and linen) industries – can be found in: F. Mendels, "Proto-industrialization: The First Phase of the Industrialization Process," in: *JEcH*, XXXII (1972), pp. 241-261 and P. Kriedte, H. Medick and J. Schlumbohn, *Industrialisierung vor der Industrialisierung. Gewerbliche Warenproduktion auf dem Land in der Formationsperiode des Kapitalismus* (Göttingen, 1978). Cf. also collection of articles on various European countries in: S. C. Ogilvie and M. Cerman (eds.), *European Proto-industrialization* (Cambridge, 1996); L. A. Clarkson, *Proto-Industrialization: The First Phase of Industrialization?* (Basingstoke, 1985), chs. 1-3. P. Kriedte, *Spätfeudalismus und Handelskapital. Grundlinien der europäischen Wirtschaftsgeschichte vom 16. bis zum Ausgang des 18. Jahrhunderts* (Göttingen, 1980), English Transl. *Peasants, Landlords and Merchant Capitalists. Europe and the World Economy, 1500-1800* (Leamington Spa, 1983); Britain: P. Hudson, "Industrial Organization and Structure" in: R. Floud and P. Johnson (eds.), *The Cambridge Economic History of Modern Britain,* Vol. I. *Industrialisation, 1700-1860* (Cambridge, 2004), pp. 28-56, esp. pp. 30-33.

11 Hamilton, *Economic History*, pp. 131-4.

> Domestic labour skills were of a low order even in the basic manufacturing processes. Foreign labour was not only difficult and expensive to attract, but also proved hard to absorb into the domestic system and into Scottish society as a whole. Moreover much of the home wool clip was of a quality consistent with low agricultural productivity and wasteful farm practices.[12]

Accordingly, export markets were captured in the coarser, lower end of the market.

The customs accounts point towards *Aberdeen* as a significant point of dispatch for Scottish woollen manufactures. The production of stockings had developed around Aberdeen along proto-industrial lines early on. In the first half of the century, Aberdeen merchants provided circulating capital to "as many as thirty thousand mainly part-time weavers and knitters"[13] in Aberdeenshire and Kincardineshire on a putting-out basis and disposed of large quantities of higher-grade woollen manufactures weekly.[14] Accordingly, Aberdeen was, prior to the rise of the Scottish woollen industry in the Scottish Borders in the 1790s, the largest port of dispatch for woollen manufactures from Scotland, as the following table, derived from the full set of Scottish customs accounts (port books, 1754, 1755) demonstrates.

Table 4: Exports of Woollen Manufactures from Scottish Ports, 1754, 1755 (Sterling)

NAS, E504, complete set of customs accounts.

	1754		1755	
	Sterling	**%**	**Sterling**	**%**
Aberdeen	£22,191	56%	£25,493	57%
Bo'ness	£5,783	14%	£6,201	14%
Glasgow	£9,266	23%	£12,297	27%
Other	£2,668	7%	£933	2%
Total	£39,908	100%	£44,924	100%

12 C. Gulvin, "The Union and the Scottish Woollen Industry, 1707-1760," in: *SHR*, L (1971), pp. 121-137, at p. 122.
13 C. A. Whatley, *Scottish Society. Beyond Jacobitism, Towards Industrialization* (Manchester - New York, 2000), p. 129.
14 Hamilton, *Economic History*, p. 157f.

Table 5: Exports of Woollen Manufactures by Type, 1754

NAS, E504, complete set of customs accounts.

	Woollendries by measure		Stockings		Other		Total Woollen Manufactures
	Sterling	%	Sterling	%	Sterling	%	Sterling
Aberdeen	£433	2%	£21,736	*98%*	£22	0%	£22,191
Bo'ness	£5,783	*100%*					£5,783
Glasgow	£9,262	*100%*	£2	0%	£2	0%	£9,266
Other	£1,508	57%	£794	30%	£366	14%	£2,668
Total	£16,986	43%	£22,532	56%	£390	1%	£39,908

Table 6: Exports of Woollen Manufactures by Type, 1755

NAS, E504, complete set of customs accounts.

	Woollendries by measure		Stockings		Other		Total Woollen Manufactures
	Sterling	%	Sterling	%	Sterling	%	Sterling
Aberdeen	£478	2%	£24,222	*95%*	£793	3%	£25,493
Bo'ness	£6,121	*99%*	£21	0%	£59	1%	£6,201
Glasgow	£12,274	*100%*	£11	0%	£12	0%	£12,297
Other	£508	54%	£224	24%	£201	22%	£933
Total	£19,381	43%	£24,478	54%	£1,065	2%	£44,924

A dual pattern of trade had evolved, commercial activity being shared between Aberdeen, whose export activity focused on stockings, and the Glaswegian ports (Greenock, Port Glasgow), as well as Bo'ness. The latter ports exported chiefly "woollendries by weight (cwt) or measure (yds)", which, as it represented a common lump sum declaration of woollen manufactures used by the Customs, sometimes also included unknown quantities of stockings. Aberdeen exported stockings mainly to the Netherlands (52 per cent, 1754; 75 per cent, 1755) and the German Empire (48 per cent, 1754; 24 per cent, 1755). Glasgow on the other hand exported woollendries almost exclusively to North America and the Caribbean (99.47 per cent, 1754; 99.8 per cent, 1755).[15] Some quantities of worsted stockings were also sent to German

15 Calculated from the full set of Scottish customs accounts, 1754-5. Valuations taken from TNA, Customs 14 (1755).

ports from *Shetland*.[16] As the main foreign market of the Shetlands and their fisheries were the big North-west German ports of Hamburg and Bremen, these woollens were often added to existing fish cargoes destined for Germany. It seems likely that they were sold near cost-price, as German production costs in the woollen industries are commonly held to have been about equal to the cost structure prevailing in Britain.[17] Technically this should have ruled out a large mutual trade in these items.

Lead, a further significant item on Scotland's domestic export account, was likewise dispatched chiefly to Dutch ports.

Table 7: Markets for Bar Lead (Totals, 1755-59)

TNA, Customs 14

	Tons	Sterling	%
Holland	10528.36	£173,718	86.92%
Sweden	645.76	£10,655	5.33%
Danzig	378.30	£6,242	3.12%
Germany	232.24	£3,832	1.92%
Denmark-Norway	220.00	£3,630	1.82%
Russia	84.00	£1,386	0.69%
Other	23.45	£387	0.19%

In 1754, 96 per cent of Scotland's lead exports, 87 per cent of which were declared for Dutch destinations, went through *Leith* (see following table).

16 P. R. Roessner, *Scottish Trade with German Ports 1700-1770. A Study in Early Modern Multilateralism* (Stuttgart, forthcoming), and ch. 7 below.

17 F.-W. Henning, *Handbuch der Wirtschafts- und Sozialgeschichte Deutschlands*, Vol. 1. *Deutsche Wirtschafts- und Sozialgeschichte im Mittelater und in der Frühen Neuzeit* (Paderborn, 1991), p. 839. For the Scottish industry, see: I. Barnes, "The Aberdeen Stocking Trade," in: *Textile History*, VIII (1977), pp. 77-98, Fig. 1 (p. 78f.); Gulvin, "Woollen Industry," p. 122. NAS, RH2/5/11, *Memorandum Concerning the Manufacture of Woollens in Aberdeenshire.*

Table 8: Exports of Bar Lead from Scottish Ports, 1754 (£Sterling)

Database extracted from Scottish Customs accounts: NAS, E504.

port	country	Sum
ANSTRUTHER	SWEDEN	247.50
Subtotal port		247.50
BONESS	GERMANY	198.00
Subtotal port		198.00
DUMFRIES	HOLLAND	511.50
Subtotal port		511.50
DUNDEE	DENMARK&NORWAY	82.50
	POLAND	90.75
Subtotal port		173.25
FORT WILLIAM	FRANCE	742.50
Subtotal port		742.50
LEITH	FRANCE	2491.50
	HOLLAND	44619.01
	POLAND	825.00
	SWEDEN	3390.75
Subtotal port		51326.26
Grand Total		53199.01

Virtually the same relations obtain for 1755, the second year for which the full set of Scottish customs accounts has been examined.[18] Leith emerged as Scotland's largest lead-exporting port because the mines of the two major producers (the Duke of Queensberry and the Earl of Hopetoun, at Wanlockhead and Leadhills in the Scottish Borders) were connected to this port by road, which was better than the transport links to Scotland's south-western ports such as Dumfries.[19] Whilst in the seventeenth century these mines had exported lead in considerable quantities to the Netherlands in its unprocessed form (ore) still, in the eighteenth century, lead was now predominantly exported in the shape of bars.[20]

The market for *fish*, a further commodity of significance on the Scottish domestic export account, obtained as follows:

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18 In 1755, 97 per cent of bar lead exports went through Leith, of which 86 were declared for a Dutch port. NAS, E504/22/5-6.

19 T. C. Smout, "Leadmining in Scotland, 1650-1850" in: P. L. Payne (ed.), *Studies in Scottish Business History* (1967), pp. 103-135.

20 Customs accounts Leith, NAS, E504/22. Smout, "Leadmining in Scotland". S. G. E. Lythe and J. Butt, *An Economic History of Scotland, 1100-1939* (Glasgow - London, 1975), p. 42f., p. 131. I. D. Whyte, *Scotland's Society and Economy in Transition, c.1500-c.1760* (Basingstoke - London - New York, 1997), p. 142, p. 148; Id., *Scotland before the Industrial Revolution. An Economic and Social History c. 1050 – c. 1750* (London - New York 1995), p. 276f.

Table 9: The Market for Fish Exported From Scotland, 1755-59 (Totals)

TNA, Customs 14

Type of Fish	Export Destination		% of Type	% of Total Fish Exports
Cod & Ling	Germany	£13,789	50%	5%
	Ireland	£9,016	33%	3%
	Spain	£2,848	10%	1%
	Other	£2,043	7%	1%
	Totals	***£27,696***	***100%***	***10%***
Herring	Ireland	£80,320	58%	30%
	America	£40,564	29%	15%
	Germany	£10,474	8%	4%
	Sweden	£2,960	2%	1%
	Totals	***£138,195***	***100%***	***51%***
Salmon	Holland	£62,602	59%	23%
	Italy	£25,432	24%	9%
	Spain	£11,527	11%	4%
	Germany	£2,508	2%	1%
	Totals	***£105,631***	***100%***	***39%***
Other Fish		***£113***	***100%***	***0%***
Totals Fish		£271,635		100%

In value terms, herring dominated Scottish fish exports, followed by cod & ling and salmon. Whilst in terms of total fish exports, the rank order of markets was Ireland⇨Holland⇨Germany, there were marked differences in the markets for particular types of fish. Germany was the biggest market for cod & ling fish[21], whilst herring went mainly to Ireland. The large Irish market for herring – at least as far as the Shetland fisheries were concerned – did not emerge prior to the mid-1750s.[22] Salmon was dispatched chiefly to Dutch ports.

With lead and fish, primary and semi-processed commodities therefore still loomed large on Scotland's domestic export account overseas towards the 1760s. Linen and woollen textiles were the only manufactures of significance that were exported overseas. With 3 and 4 per cent of domestic and 2 and 1 per cent of total exports respectively, iron and leather manufactures did not yet attain significantly large shares in domestic and total Scottish exports overseas.[23] This pattern was

21 A detailed examination can be found in Roessner, *Multilateralism*, and in ch. 7 below.
22 NAS, E504/32/1seq.
23 See Table 1 above.

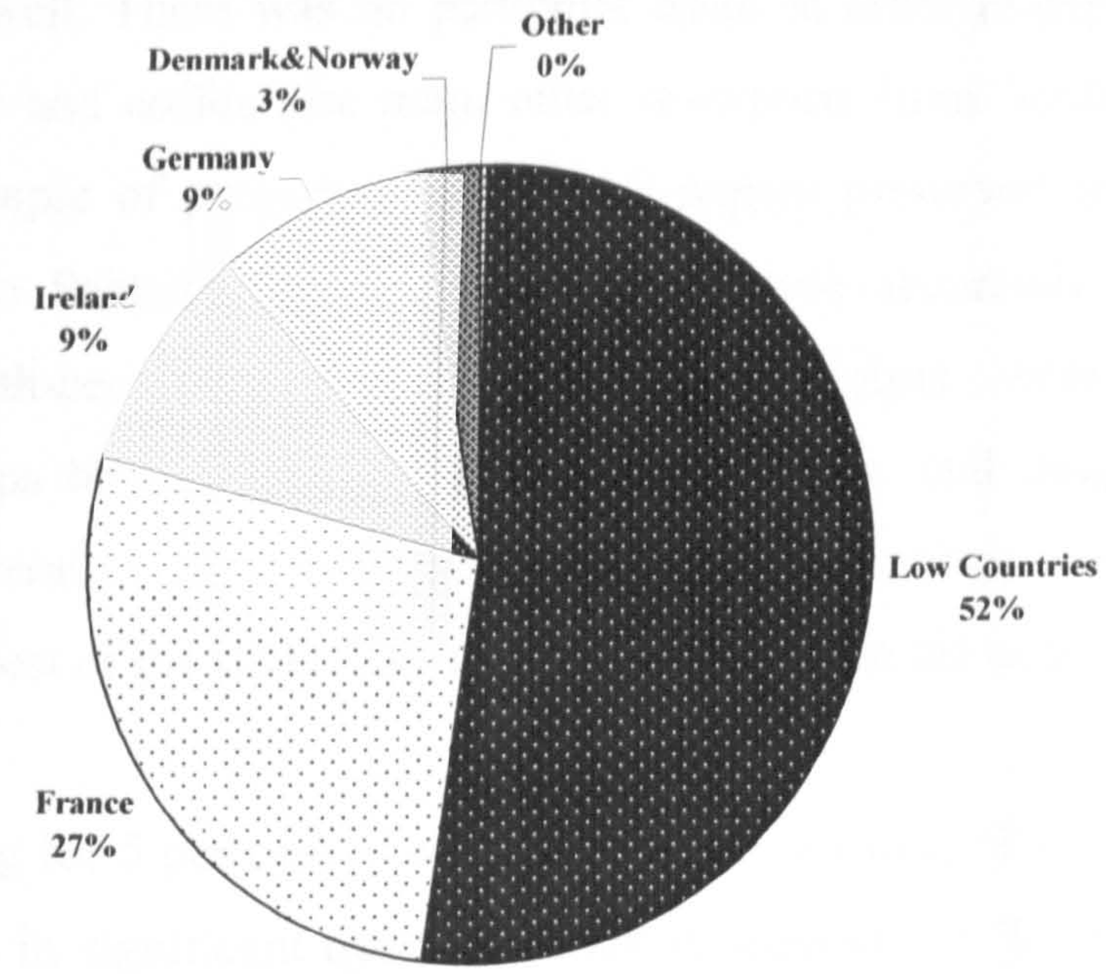
markedly different from the English overseas trades in the period; England already enjoyed a large share of manufactures in total exports (Table 1 above). This discussion will be taken further in chapter 6. With re-exports usually exceeding domestic exports, however, the structure of the Scottish export volume was dominated by the transit trades in tobacco and sugar. Tobacco alone accounted for 42 per cent of total exports on average in 1755-59.

5.1.1.2 Re-exports

Tobacco and sugar dominated Scotland's re-exports (83 per cent of the totals in 1755-59). Adding German and Irish linens, as well as American rice, 97 per cent of Scottish re-exports are covered for most years in the period examined. In terms of the legal trades, tea, coffee, and spices, which were all of some significance in the English re-export volume[24], were of no importance for Scotland's commerce. Towards the end of the period the markets for tobacco obtained as follows:

24 Davis, "Foreign Trade, 1700-1774".

Figure 1: Markets for Scottish Re-exports of Tobacco (1755-59)



The *Irish* market for tobacco was chiefly an institutional product of the English Navigation Acts, which until 1780 prohibited the direct importation of tobacco and other "enumerated commodities" into Irish ports.[25] The *French* market on the other hand resulted from a monopsonistic agreement with the French tobacco purchasing monopoly whose farmers employed resident purchasing agents at London, Glasgow and Edinburgh. Even during wartime, when trade with France was notionally prohibited, tobacco was exempt from these regulations; there were regular bulk consignments of the product to French ports. Overall, the Netherlands, however, proved to be the largest market as such, as apparent from the customs accounts and trade statistics – which might, however, be susceptible to a certain degree of merchants' imaginativeness in their export declarations.[26] As the *German* market for tobacco will be discussed in chapters 7 and 8 below, the discussion on continental tobacco markets will not be carried further at present.

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25 Cochran, *Scottish Trade with Ireland*, pp. 75-80.

26 As noted above, a considerable amount of declared re-exports, drawing back the full sum of customs liabilities incurred upon import, might have been successfully re-landed within British realms. See Chs. 2, 3, esp. section 3.1.4.

Continental markets for *rice* were largely shared between Dutch and German ports. Thus the patterns of Scottish re-exports of American rice will be discussed *en detail* in chapter 7 as well. There was no particular trade in other re-exports from Scotland, such as sugar and coffee (the main other re-exports from Scotland apart from tobacco). If a sample of preserved merchants' papers preserved in Scottish archives with regard to Scottish-German trade for instance accurately reflected common mid-eighteenth-century business practice, re-exports were usually consigned in entire ships bound for one particular destination, and freight space would be bought by several co-partnerships of merchants. These ships were mainly laden with tobacco, the rest of the ships' capacity being filled with the odd cargoes of rice, sugar and coffee.[27]

Sugar, accounting for 5 per cent of re-exports and 3 per cent of total exports (Scotland), was shipped in significant quantities only to Ireland. 99.79 per cent of (domestic) exports of refined sugar went to Ireland on average, 1755-59. Some quantities went back to the Americas.[28] Semi-processed or *Muscovado* sugar, the main type of re-exported sugar, was likewise shipped chiefly to Ireland (95 per cent, 1755-59), as well as occasionally to German (3 per cent) and Dutch (2 per cent) ports.[29]

Table 10: Re-exports of Muscovado Sugar, 1755-59

TNA, Customs 14

	Ireland		Africa		Germany		Holland		Totals
	Sterling	%	Sterling	%	Sterling	%	Sterling	%	Sterling
1755	£8,666	100%							£8,666
1756	£25,042	100%	£1	0%					£25,043
1757	£19,409	99%					£152	1%	£19,561
1758	£20,500	100%							£20,500
1759	£32,552	86%			£3,557	9%	£1,585	4%	£37,694

The reasons for Ireland absorbing almost 100 per cent of Scottish sugar re-exports are two-fold. On the one hand, Irish merchants were excluded from direct trade in colonial goods enumerated in the English Navigation Acts, particularly sugar and

27 Ch. 8 below.
28 TNA, Customs 14.
29 Ibid.

tobacco.[30] On the other hand, continental sugar markets were notoriously hard to capture, due to an extremely competitive pricing of French sugar on these markets. On the Hamburg market for instance, British suppliers were constantly undercut by the French in the eighteenth century.[31]

30 Cochran, *Trade with Ireland*, p. 74f., pp. 80-84.
31 Roessner, *Multilateralism*.

5.1.2 Imports

Table 11: The Structure of the Scottish Import Volume 1755-59

Average figures calculated from TNA, Customs 14 as in Table 1

Commodity Class	Commodity	Sterling	% of total M
	Tobacco	£179,547	32%
	Sugar	£38,818	7%
Total Grocery & Beverages		*£236,197*	42%
	Flax	£93,134	16%
	Hemp	£10,377	2%
Total Textile Inputs		*£111,106*	20%
	Linen: Narrow German	£17,756	3%
	Linen: Plain Irish	£52,767	9%
Total Textile Manufactures		*£77,093*	14%
	Deals	£19,038	3%
Total Wood, Timber		*£40,315*	7%
	Linseed	£16,365	3%
	Cereals/Grain	£19,567	3%
Total Vegetable Products		*£37,145*	7%
	Bar Iron	£16,581	3%
Totals Iron (man./partly man.)		*£22,133*	4%
Mineral Products		*£14,060*	2%
Dyestuffs, Drugs		*£8,586*	2%
	Animal prod. excl.Hides	£6,444	1%
	Skins, Hides, Leather	£7,602	1%
Total Animal Prod. excl. Fats		*£14,047*	2%
Animal & Vegetable Fats		*£5,252*	1%

In terms of structure and composition, the Scottish import volume was largely a reflection of Scotland's (re-)export account. Whilst re-exports can be viewed as "surplus imports"[32] in England's case, i.e. as surplus to domestic consumption requirements, extra quantities yielding a handy extra profit upon re-shipping after the needs of the domestic market had been met, Scotland, geared towards warehousing, imported *more* commodities for re-shipping than for domestic sale. Accordingly, unprocessed tobacco and sugar, Irish and German linens accounted for about 52 per

32 I have adapted this very apt term from Dr Nuala Zahedieh, University of Edinburgh. Personal communication with Dr Zahedieh.

cent of Scotland's imports. A similar relation (50 per cent) obtains for the share of these products in total Scottish exports, 1755-59.[33] For 1755-59, the re-export-to-import quota for tobacco obtained at 89 per cent, making this commodity the largest single item on both Scotland's import and export account.[34] The re-export activity therefore was by far the most important branch of the Scottish trades, to a much greater extent than for instance in comparison to England. This peculiar trading pattern, as will be developed further in chapter 6, was a deliberate decision made by Scots merchants, realizing that the resource base, consumption and export potential of the domestic economy proved too weak in order for overall levels of overseas commerce to be increased significantly using the domestic economy in the longer run (1700-1760).

The remaining imports, mainly of flax, some iron and naval stores were determined by relative resource endowment and factor costs, and the needs of the ever-expanding Scottish linen industries for additional and better inputs. *Flax* was predominantly imported from Russian and Dutch ports. Amongst Russian ports, the Livonian ports which had been recently (1721) annexed from Sweden (Riga, Narva, Reval/Tallinn) dominated the picture.

Table 12: Origin of Flax Imports, 1755-59

TNA, Customs 14

	Holland		Livonian Ports		Other Russia		Totals Russia		Other		Totals
	tons	%	tons	%	tons	%	tons	%	tons	%	
1755	865	52%	521	31%	213	13%	733	44%	60	4%	1,658
1756	748	45%	664	40%	178	11%	842	51%	68	4%	1,658
1757	877	42%	686	33%	465	22%	1,151	55%	75	4%	2,102
1758	1,125	42%			931	44%	931	55%	83	4%	2,140
1759	1,212	43%			1,517	54%	1,517	54%	59	2%	2,788

Hemp was imported mostly from Russian, as well as Prussian ports.

33 Table 1.

34 In volume terms (lbs). It needs to be taken into account that frequently there was a delay of one ore more years between import and re-export, as a full draw-back of import duties could be obtained up to three years after the import declaration.

Table 13: Origin of Hemp Imports, 1755-59

TNA, Customs 14

	Denmark-Norway		Germany		Livonian Ports		Other Russia		Totals Russia		Poland		Prussia		Totals	
	tons	%	tons	%	tons	%	tons	%	tons	%	tons	%	tons	%	tons	%
1755	7	2%	1	0%	27	8%	151	48%	178	56%	14	5%	116	37%	316	100%
1756	5	1%	2	1%	30	8%	112	32%	142	40%	48	13%	156	44%	353	100%
1757					47	4%	1180	93%	1228	97%	21	2%	20	2%	1269	100%
1758							212	42%	212	42%	79	16%	216	43%	508	100%
1759			15	3%			513	85%	513	85%	5	1%	67	11%	600	100%

5.2 The Distribution of the Scottish Trade Volume (I): Foreign Countries and Ports

5.2.1 The Overseas Trades

Aggregated for Scotland as a whole, violating the insight that "there were many Scotlands"[35], the following picture emerges:

Table 14: The Geographical Distribution of Scotland's Overseas Trade Volume, 1755-1759

TNA, Customs 14.

	Imports	Exports (total)	GTT
America	47%	31%	38%
Holland / Flanders	13%	35%	25%
Ireland	12%	12%	12%
Scandinavia	7%	3%	5%
Germany	4%	6%	5%
Russia	10%	0%	4%
Other	7%	13%	10%

"Germany": Mainly Bremen and Hamburg; in general equal to the German Empire, excluding Swedish Pomerania, Flanders and those parts of Prussia which were not part of the Empire. "Russia": incl. Livonia. Scandinavia: Denmark, Norway, Sweden, Swedish Pomerania. Other: "Africa", France, Greenland, Guernsey, Isle of Man, Italy, "Poland" (Danzig), Portugal (incl. Madeira), Prussia, Spain (incl. Canary Islands, Gibraltar).

From this, the emergence and firm establishment of a second, new eighteenth-century trade pattern alongside a strong and traditional, pre-1700 trade pattern can be seen quite clearly. On the one hand, the European market (including England)[36], was still prominent in terms of its share in Scotland's gross total overseas trade. The "new" or Atlantic pattern on the other hand was marked by the rise of the colonial trades, mainly in tobacco and sugar, since c. 1730. It became especially pronounced after 1736/8, i.e. when the "long eighteenth-century overseas trade cycle"

35 T. M. Devine, "The Modern Economy: Scotland and the Act of Union" in: Id., C. L. Lee and G. C. Peden (eds.), *The Transformation of Scotland. The Economy Since 1700* (Edinburgh, 2005), pp. 13-33, at p. 14.

36 In fact England, as has been shown above, attained an even larger share than is usually appreciated. Ch. 4, section 4.3.3, and below, section 5.2.2.

commenced.[37] Accordingly, the Americas attained large shares in Scotland's overseas trade volume.

It is also clear that throughout the period and in analytical terms, both patterns – Scotland's European link and the newly-emerged American trades – are not meaningfully separable. The huge quantities of Scots linen and rope manufactures exported to the Americas could not have been produced without the large consignments of flax and hemp from Baltic and Dutch ports. Frequently continental markets for tobacco were also those markets where Scottish ships picked up manufactures to be exchanged in Africa for slaves. These were in turn exchanged for sugar in the Caribbean, and tobacco in North America, which were subsequently shipped to Scotland, before being dispersed on continental markets.[38] Throughout the eighteenth century therefore both patterns were integrated, linked back to and fuelled one another.

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37 See ch. 4 , section 4.3.1 above.

38 M. Duffill, "The Africa Trade from the Ports of Scotland, 1706-66," in: *Slavery and Abolition*, XXV, 3 (2004), pp. 102-122. See also ch. 8 below.

5.2.1.1 Exports Overseas

The Low Countries and the Americas dominated Scotland's domestic export account.

Table 15: Composition of Exports to the Low Countries (1755-59)

TNA, Customs 14

	Domestic Exports		Re-Exports		Total Exports	
	Sterling	%	Sterling	%	Sterling	%
Holland						
Tobacco			£784,236	95%	£784,236	65%
Rice			£31,800	4%	£31,800	3%
Woollendries	£28,022	7%			£28,022	2%
Worsted Stockings	£110,236	28%			£110,236	9%
Bar Lead	£173,718	45%			£173,718	14%
Coal	£3,978	1%			£3,978	0%
Vitriol Oil	£3,942	1%			£3,942	0%
Salmon	£62,602	16%			£62,602	5%
Other	£4,860	1%	£7,682	1%	£12,542	1%
Totals	£387,358	100%	£823,718	100%	£1,211,076	100%
Flanders						
Tobacco			£52,850	100%	£52,850	99%
Herring	£352	92%			£352	1%
Coal	£29	8%			£29	0%
Totals	£381	100%	£52,850	100%	£53,231	100%

The Netherlands, as pointed out above, represented the largest market for exported woollen manufactures (57 per cent, 1755-59) and bar lead (87 per cent, 1755-59).[39] Exports to *America* were, unsurprisingly, dominated by linen and woollen manufactures. Leather (6 per cent) and iron manufactures (4 per cent) made an appearance in value terms, too.

39 Calculated from TNA, Customs 14.

Table 16: Domestic Exports to America, 1755-59

	Domestic Exports Sterling	%
Refined Sugar	£12,764	1%
White Thread	£15,009	2%
Plain Scotch Linen	£325,474	34%
Plain Handkerchiefs	£91,813	10%
Linen: Chequered / Striped	£12,277	1%
Linen: Chequered Handkerchiefs	£27,248	3%
Linen: Printed	£33,416	3%
Linen: Sailcloth	£18,658	2%
Totals Linen	*£517,511*	*54%*
Woollendries by weight	£61,305	6%
Woollendries by Measure	£27,186	3%
Worsted Stockings	£7,996	1%
Totals Woollen Manufactures	*£98,418*	*10%*
Haberdashery	£51,340	5%
Cordage	£14,637	2%
Hats	£41,134	4%
Thread Stockings	£22,571	2%
Iron Manufactures	£34,864	4%
Wrought Copper, Tin, Pewter	£7,861	1%
Tallow Candles	£10,572	1%
Herring	£40,564	4%
Other Fish	£335	0%
Leather Manufactures	£61,160	6%
Other	£38,845	4%
Totals	£957,029	100%

5.2.1.2 Re-exports Overseas

Re-exports from Scotland, as apparent from the customs declarations (and trade statistics), mainly went to America, the Netherlands, France, Ireland[40] and the German Empire. Re-exports to the *Americas* were dominated by linens, Narrow German accounting for 36 and Plain Irish for 44 per cent of the totals.[41] But overall the story of markets for Scottish re-exports clearly is the story of tobacco re-exports to continental European destinations.[42]

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40 Cochran, *Trade with Ireland*, ch. 5.
41 Calculated from TNA, Customs 14.
42 Present chapter, section 5.1.1.2.

Table 17: Markets for Scottish Re-exports (Totals, 1755-59)

	Tobacco		Total Re-Exports	
	Sterling	%	Sterling	%
Low Countries	£837,085	52%	£876,234	43%
France	£432,023	27%	£432,023	21%
Ireland	£147,753	9%	£261,122	13%
Germany	£136,028	9%	£170,180	8%
Denmark&Norway	£39,991	3%	£41,405	2%
Poland	£34	0.00%	£354	0.02%
Russia			£534	0.03%
Sweden	£1,002	0.06%	£2,526	0.12%
Other	£5,085	0.32%	£256,468	12.57%
Totals	£1,599,001	100%	£2,040,845	100%

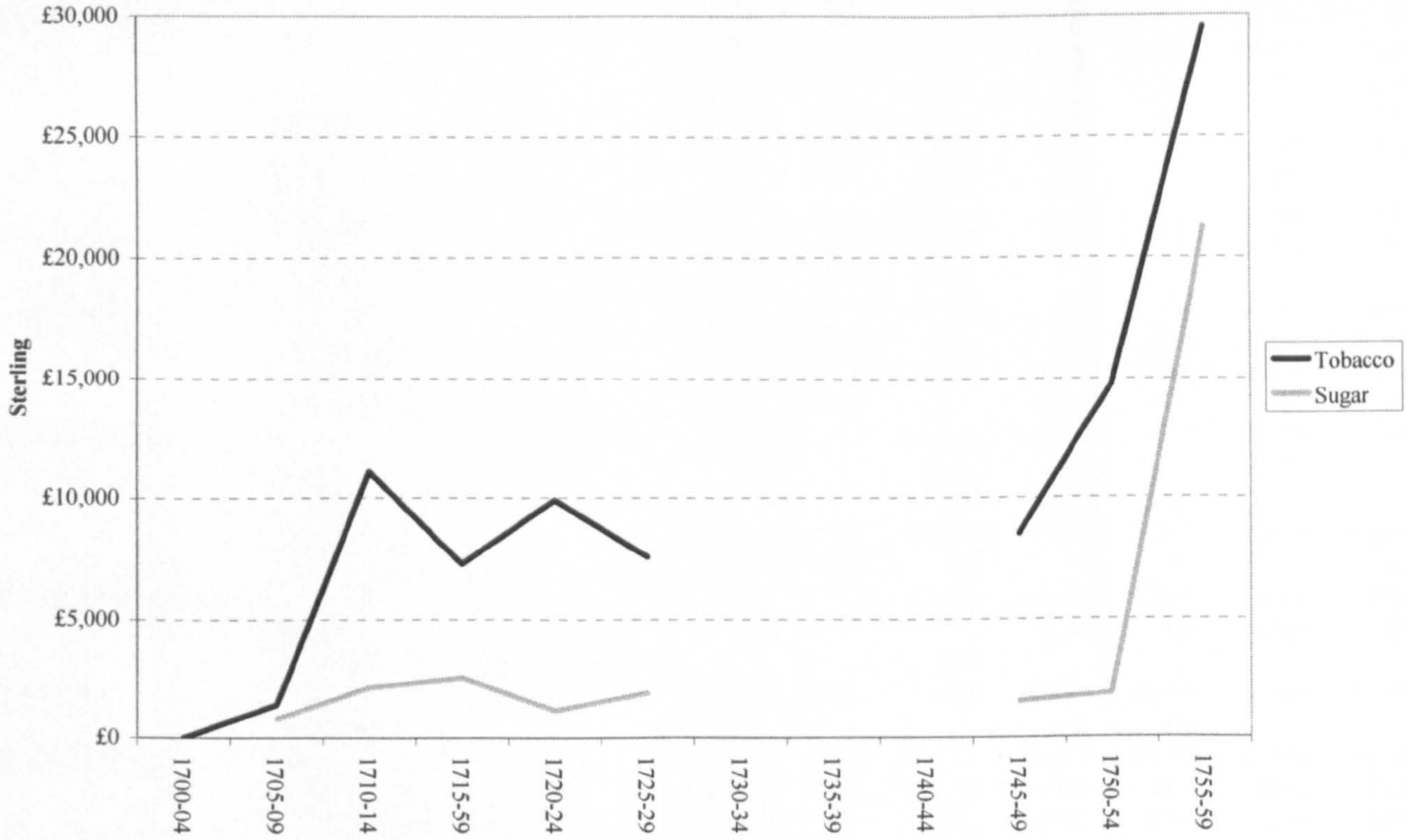
Germany: German Empire, excl. Ducal Prussia

The relatively strong position of *Ireland* amongst Scottish re-exports has been explained above. The fact that one "protected" market, where direct imports of enumerated commodities were forbidden, and which was almost directly adjacent to (some) Scottish ports, lay open to Scots traders, who on the other hand were now (1707) allowed to import these goods directly and legally, made at least for a considerable short-run commercial stimulus. Irish trade statistics, breaking down Irish trade with Britain into trade with "England" and "Scotland" and covering the years 1700-1730, have been preserved. They show that re-exports to Ireland increased considerably after 1707, even though it needs to be borne in mind that factual levels might have been much higher than those recorded prior to 1707 due to clandestine activity.[43]

43 TNA, Customs 15.

Figure 2: Re-exports of Tobacco and Sugar from Scotland to Ireland, 1700-1760

Cochran, *Trade with Ireland*, p. 76, Table 22; p. 81, Table 25



5.2.1.3 Imports from Overseas

The *Americas* dominated the total volume of imports overseas by the token of tobacco and sugar. They were followed by the Netherlands and Ireland. Amongst imports from America, tobacco and sugar unsurprisingly took pole position. Cotton was as yet (1760) of no relevance whatsoever. Rice was not insignificant. It originated exclusively in South Carolina and found a burgeoning re-export market in the Netherlands and the German Empire.[44]

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44 Ch. 7.

Table 18: Imports from America (North America, Caribbean)

		1755	1756	1757	1758	1759	1760	1761
Grocery & Beverages	Tobacco	£158,341	£127,225	£188,027	£269,036	£155,059	£335,234	£273,561
	Sugar	£32,271	£36,503	£44,285	£30,298	£50,633	£60,537	£50,645
	Rum	£2,917	£3,931	£2,023	£2,403	£2,596	£2,097	£9,114
	Madeira	£698	£472	£200	£400	£494	£651	£281
	Ginger	£353	£761	£606	£424	£468	£281	£12
	Coffee			£672	£65		£574	
	Other Grocery	£26	£373	£489	£368	£230	£83	£54
Textile Inputs	Cotton	£5,292	£6,769	£2,848	£4,047	£5,047	£4,810	£3,395
	Other Textile Raw / Manufactured	£95	£5	£2				
Wood / Timber	Mahogany	£2,791	£3,109	£1,778	£1,472	£3,296	£2,791	£2,052
	Other Timber	£4,993	£7,228	£879	£1,114	£756	£27,669	£1,163
	Hoops, Staves	£14,285	£5,478	£3,694	£9,285	£8,369	£9,899	£7,457
	Other Wood products (man.)	£193	£112	£117	£170	£47	£115	£67
Vegetable Products	Rice	£3,264	£6,455	£6,557	£14,592	£19,513	£12,376	£12,197
	Corn (Maize)			£740	£102			
	other grain			£65	£222	£120		
	Linseed	£4,040	£4,761	£2,180	£1,036	£1,478	£484	£4,041
	other vegetable products		£2	£21		£1		£6
Iron / Metal Manufactures	Pig Iron	£314	£385	£1,447	£4,150	£3,028	£5,024	£693
	Bar Iron				£280	£435	£522	£50
	Other (raw, manufactured metals)			£45				
Minerals	Pitch & Tar	£2,209	£3,569	£3,308	£7,001	£8,463	£2,668	£4,955
	Other Minerals				£12	£23		
Dyestuffs, Drugs	Indigo	£173	£906	£2,996	£10,417	£7,192	£7,687	£5,141
	Other Dyestuffs	£348	£1,054	£582	£543	£427	£581	£222
	Other drugs, Chemicals etc.	£322	£201	£97	£133	£339	£356	£389
Animal Products	Animal Products incl. Hides	£386	£773	£493	£1,057	£962	£414	£1,011
	Whale / Train Oil	£1,565	£2,536	£37	£474		£849	£3,122
Other	other	£12	£5		£27			£36
	Totals	£234,888	£212,738	£264,746	£359,127	£268,976	£475,704	£379,663

Table 19: Imports from America (Percentage relations)

		1755	1756	1757	1758	1759	1760	1761
Grocery & Beverages	Tobacco	67%	60%	71%	75%	58%	70%	72%
	Sugar	14%	17%	17%	8%	19%	13%	13%
	Rum	1%	2%	1%	1%	1%	0%	2%
	Madeira	0%	0%	0%	0%	0%	0%	0%
	Ginger	0%	0%	0%	0%	0%	0%	0%
	Coffee			0%	0%		0%	
	other Grocery	0%	0%	0%	0%	0%	0%	0%
Textile Inputs	Cotton	2%	3%	1%	1%	2%	1%	1%
	Other Textile Raw / Manufactured	0%	0%	0%				
Wood / Timber	Mahogany	1%	1%	1%	0%	1%	1%	1%
	Other Timber	2%	3%	0%	0%	0%	6%	0%
	Hoops, Staves	6%	3%	1%	3%	3%	2%	2%
	Other Wood products (man.)	0%	0%	0%	0%	0%	0%	0%
Vegetable Products	Rice	1%	3%	2%	4%	7%	3%	3%
	Corn (Maize)			0%	0%			
	other grain			0%	0%	0%		
	Linseed	2%	2%	1%	0%	1%	0%	1%
	other vegetable products		0%	0%				0%
Iron / Metal Manufactures	Pig Iron	0%	0%	1%	1%	1%	1%	0%
	Bar Iron				0%	0%	0%	0%
	Other (raw, manufactured metals)			0%				
Minerals	Pitch & Tar	1%	2%	1%	2%	3%	1%	1%
	Other Minerals				0%	0%		
Dyestuffs, Drugs	Indigo	0%	0%	1%	3%	3%	2%	1%
	other Dyestuffs	0%	0%	0%	0%	0%	0%	0%
	other drugs, Chemicals etc.	0%	0%	0%	0%	0%	0%	0%
Animal Products	Animal Products incl. Hides	0%	0%	0%	0%	0%	0%	0%
	Whale / Train Oil	1%	1%	0%	0%		0%	1%
Other	Other	0%	0%		0%			0%
	Totals	100%	100%	100%	100%	100%	100%	100%

The Netherlands were the second biggest market for Scottish imports.

Table 20: Imports from the Netherlands, 1755-59 (Sterling)

	1755	1756	1757	1758	1759
Grocery & Beverages	£182	£435	£1,139	£4,425	£1,235
Flax	£38,931	£33,641	£39,449	£50,643	£54,523
Other Textile Raw Materials	£346	£714	£2,395	£995	£1,341
Linen	£1,111	£2,825	£3,175	£516	£5,087
Other Textile Manufactures	£75	£139	£247	£211	£261
Wood, Timber, Wood Products	£2,138	£338	£377	£747	£2,029
Grain	£21	£4,803	£912	£606	£24
Linseed	£11,502	£12,331	£14,846	£7,881	£11,946
Other vegetable Products	£795	£653	£1,247	£1,918	£1,197
Old Iron	£2,728	£2,119	£2,342	£2,983	£2,233
Other Iron partly man.	£347	£383	£556	£295	£1,959
Iron Manufactures	£220	£827	£656	£207	£1,062
Minerals	£1,509	£1,028	£1,279	£2,180	£1,725
Madder	£2,754	£1,774	£2,297	£3,279	£2,357
Other Drugs, Dyestuffs, Chemicals	£359	£372	£975	£404	£500
Other	£1,209	£2,205	£1,610	£1,908	£2,660
Total IMP	*£64,227*	*£64,587*	*£73,503*	*£79,198*	*£90,140*

Table 21: Imports from the Netherlands, 1755-59 (%)

	1755	1756	1757	1758	1759
Grocery & Beverages	0%	1%	2%	6%	1%
Flax	***61%***	***52%***	***54%***	***64%***	***60%***
Other Textile Raw Materials	1%	1%	3%	1%	1%
Linen	2%	4%	4%	1%	6%
Other Textile Manufactures	0%	0%	0%	0%	0%
Wood, Timber, Wood Products	3%	1%	1%	1%	2%
Grain	0%	7%	1%	1%	0%
Linseed	***18%***	***19%***	***20%***	***10%***	***13%***
Other vegetable Products	1%	1%	2%	2%	1%
Old Iron	4%	3%	3%	4%	2%
Other Iron partly man.	1%	1%	1%	0%	2%
Iron Manufactures	0%	1%	1%	0%	1%
Minerals	2%	2%	2%	3%	2%
Madder	***4%***	***3%***	***3%***	***4%***	***3%***
Other Drugs, Dyestuffs, Chemicals	1%	1%	1%	1%	1%
8-10 Other	2%	3%	2%	2%	3%
Total IMP	*100%*	*100%*	*100%*	*100%*	*100%*

The main imports from the Netherlands were flax, linseed and madder, intermediary products or inputs used in the Scottish textile industries. *Flanders* was not normally a point of origin of significance for Scottish imports. Imports from *Ireland* were dominated by linen, grain, cattle, meat and horses.[45] In this way, trade with Ireland can, rather than being called "inter-national trade", in the same right be labelled "inter-regional trade", as in terms of products traded and economic geography, Scottish-Irish trade was largely a custom-free, short-distance travel within an economically integrated region bordering the Irish Sea.

A concluding remark on the composition and distribution of Scotland's overseas trade volume can be made by a comparison of Scotland with her larger neighbour economy to the south. A common, yet entirely unhelpful generalization of "British" trade, which is correct only by ways of basic arithmetic, is that:

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45 For a full discussion, see Cochran, *Trade with Ireland*, chs. 6-8.

> [t]rade with the Caribbean dwarfed trade with America: in 1773 the value of imports from Jamaica was five times greater than those from all the American colonies. Nevis produced three times more British imports than New York between 1714 and 1773, Antigua three times more than New England. Sugar, not tobacco, was the biggest business of the eighteenth-century colonial empire.[46]

In value and volume terms, England's trade, which was more geared towards sugar than tobacco, dwarfed the Scottish trade volume by a factor of about 15 to 20 during most years prior to the early 1770s. It thus determined the "British" pattern.[47] If Scotland and England are examined separately, the relations were reversed. After 1763 (technically beyond the time scale of the present work), the Scottish trade statistics begin to break down trade with the Americas by colonies (North America) and islands (Caribbean), thus allowing a more differentiated view. The North American colonies, led by Virginia and Maryland, dwarfed the Caribbean, and it was tobacco, and not sugar, which determined ***Scotland's*** commercial pattern around the middle of the eighteenth century.[48] In relative terms, therefore, Scotland's links with North America were not only stronger than England's, but Scottish overseas commerce was much more biased towards one commodity: tobacco. These characteristics will be looked at in more detail in chapter 6.

5.2.1.4 Foreign Ports

Finally, a brief overview on the foreign ports involved in Scotland's overseas trade, derived from a full set of Scottish customs accounts in 1754, may be given (Table 22 below). Unsurprisingly the tobacco colonies of North America, Virginia and

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46 N. Ferguson, *Empire. How Britain Made the Modern World* (London, 2003), p. 72.

47 Although as a conceptual morphology the heuristic value of the term "Britain" / "British" might be debatable for the present analysis.

48 Scottish imports from the Caribbean accounted for only 11 per of the totals (average 1762-1776), whereas imports from North America (80 per cent of which normally came from Virginia and Maryland) were three times as high (34 per cent, average for 1762-1776). This pattern was reflected in sugar's share in total Scottish imports, yielding an average figure of only 7 per cent vis-à-vis tobacco with 33 per cent (ranging from 10 to 41 per cent, 1755-1776). All figures calculated from TNA, Customs 14. In these statistics, trade with the West Indies and the North American Colonies was listed in a lump sum entry "America" until 1762.

Maryland (usually given as "ports" in the customs accounts) dominated *imports* in monetary terms. Whilst imports from *European* destinations were relatively evenly distributed about the large European ports, Hamburg, (Camp)Veere and Dublin had significant shares amongst *domestic exports* to Europe. *Re-exports* were largely destined for the French ports of Bordeaux and Morlaix, as well as Rotterdam in the Netherlands.

Table 22: The Scottish Volume of Trade by Foreign Ports (1754)

		Imports	% of Country	% of Total M	Exports	% of Country	% of Total domX	Re-exports	% of Country	% of total ReX
Africa	Isle of May				*£728*	*100%*	*0%*			0%
North America	Virginia	£177,086	78%	33%	£53,965	71%	19%	£22,956	70%	4%
	Maryland	£31,042	14%	6%	£9,722	13%	3%	£1,402	4%	0%
	Boston	£6,197	3%	1%	£5,740	8%	2%	£6,037	18%	1%
	Other	£11,607	5%	2%	£6,719	9%	2%	£2,253	7%	0%
	Total	*£225,932*	*100%*	*42%*	*£76,146*	*100%*	*27%*	*£32,648*	*100%*	*6%*
Caribbean	Jamaica	£27,749	68%	5%	£21,079	61%	8%	£3,002	84%	1%
	St Christophers	£5,921	15%	1%	£1,820	5%	1%	£17	0%	0%
	St Kitts	£3,705	9%	1%	£4,249	12%	2%	£171	5%	0%
	Antigua	£1,787	4%	0%	£3,571	10%	1%	£115	3%	0%
	Barbados	£8	0%	0%	£3,326	10%	1%	£256	7%	0%
	Other	£1,390	3%	0%	£720	2%	0%			0%
	Total	*£40,560*	*100%*	*8%*	*£34,765*	*100%*	*12%*	*£3,561*	*100%*	*1%*
Denmark-Norway	Kristiansand	£13,500	43%	3%	£1,172	18%	0%	£2,483	21%	0%
	Arendal	£3,446	11%	1%	£430	7%	0%	£1,414	12%	0%
	Bergen	£2,704	9%	1%	£2,947	45%	1%	£2,293	20%	0%
	Mandale	£2,173	7%	0%	£16	0%	0%	£113	1%	0%
	Langesund	£1,426	4%	0%			0%	£1,560	13%	0%
	Copenhagen	£1,307	4%	0%	£565	9%	0%	£327	3%	0%
	Other	£8,502	27%	2%	£1,408	22%	1%	£3,388	29%	1%
	Total	*£31,751*	*100%*	*6%*	*£6,538*	*100%*	*2%*	*£11,578*	*100%*	*2%*
Flanders	Ostende				£198	100%	0%			0%
	Bruges						0%	£2,733	100%	0%
	Total				*£198*	*100%*	*0%*	*£2,733*	*100%*	*0%*
France	St Martines	£205	44%	0%	£5	0%	0%			0%
	Bordeaux	£81	17%	0%		0%	0%	£60,295	22%	11%
	Dunkirk	£8	2%	0%	£1,964	32%	1%	£13,232	5%	2%
	Rouen				£2,492	41%	1%			0%
	Le Havre				£875	14%	0%	£37,378	14%	7%
	Dieppe						0%	£38,277	14%	7%
	Morlaix						0%	£69,729	26%	12%
	Other	£170	37%	0%	£756	12%	0%	£52,463	19%	9%
	Total	*£464*	*100%*	*0%*	*£6,092*	*100%*	*2%*	*£271,374*	*100%*	*48%*
Germany	Hamburg	£6,151	68%	1%	£21,382	92%	8%	£27,699	66%	5%
	Bremen	£2,820	31%	1%	£1,871	8%	1%	£14,153	34%	2%
	Neustadt	£73	1%	0%			0%			0%
	Total	*£9,045*	*100%*	*2%*	*£23,253*	*100%*	*8%*	*£41,852*	*100%*	*7%*
Gibraltar	*Gibraltar*	*£60*	*100%*	*0%*	*£658*	*100*	*0%*	*£181*	*100%*	*0%*
Greenland	*Greenland*	*£7,350*	*100%*	*1%*	*£383*	*100*	*0%*	*£195*	*100%*	*0%*
Guernsey	*Guernsey*	*£10,170*	*100%*	*2%*			*0%*			*0%*
Holland	Rotterdam	£37,228	63%	7%	£13,595	19%	5%	£135,481	75%	24%
	Veere	£16,685	28%	3%	£45,244	65%	16%	£26,942	15%	5%
	Amsterdam	£5,145	9%	1%	£11,053	16%	4%	£2,921	2%	1%
	Ens						0%	£15,306	8%	3%
	Other	£351	1%				0%	£49	0%	0%
	Total	*£59,409*	*100%*	*11%*	*£69,983*	*100%*	*25%*	*£180,699*	*100%*	*32%*
Ireland	Dublin	£23,382	65%	4%	£12,750	38%	5%	£14,834	72%	3%
	Belfast	£4,916	14%	1%	£6,217	19%	2%	£680	3%	0%
	Drogheda	£4,617	13%	1%	£1,054	3%	0%	£340	2%	0%
	Cork	£49		0%	£7,103	21%	3%	£2,874	14%	1%
	Londonderry				£2,972	9%	1%			0%
	Other	£111	0%	0%	£3,128	9%	1%	£1,932	9%	0%
	Total	*£35,781*	*100%*	*7%*	*£33,224*	*100%*	*12%*	*£20,660*	*100%*	*4%*
Isle of Man	*Isle of Man*	*£8*	*100%*	*0%*	*£332*	*100*	*0%*	*£8*	*100%*	*0%*
Italy	Livorno				£1,744	34%	1%			0%
	Venice				£3,373	66%	1%			0%
	Total				*£5,117*	*100%*	*2%*			*0%*
Madeira	*Madeira*				*£226*		*0%*			*0%*
Poland	*Danzig*	*£7,307*	*100%*	*1%*	*£1,482*	*100*	*1%*	*£187*	*100%*	*0%*
Portugal	Lisbon	£6,200	89%	1%	£5,682	97%	2%	£2	6%	0%
	Oporto	£740	11%	0%	£178	3%	0%	£29	94%	0%
	Other	£23	0%	0%			0%			0%
	Total	*£6,963*	*100%*	*1%*	*£5,859*	*100%*	*2%*	*£31*	*100%*	*0%*
Prussia	*Königsberg*	*£2,706*	*100%*	*1%*			*0%*			*0%*
Russia	Riga	£40,033	80%	7%	£26	100	0%	£92	44%	0%
	St Petersburg	£8,065	16%	2%			0%	£60	28%	0%
	Nerva	£1,659	3%	0%			0%	£59	28%	0%
	Total	*£49,757*	*100%*	*9%*	*£26*		*0%*	*£211*	*100%*	*0%*
Spain	Bilboa	£18,495	86%	3%	£1,588	32%	1%			0%
	San Lucar	£2,535	12%	0%	£1,226	25%	0%			0%
	Barcelona	£47	0%	0%	£1,579	32%	1%			0%

As the discussion of the composition and distribution of Scotland's trade volume so far has only considered the *overseas* trades, a final comment on a further significant, yet usually disregarded, branch of Scotland's *total* foreign trade in the period is in order. As shown in chapter 4, exports to England (and presumably imports from England as well) retained a constant or even growing share of total Scottish foreign exports after 1707. In absolute terms, they grew considerably after 1707, matching the growth rates of Scotland's gross total overseas trade, c.1700-1755. The same situation obtains for the end years of the period under consideration (c.1760). (In fact it continued to do so well beyond). This "second pillar" of eighteenth-century commerce (chapter 1) retained a high macro-economic significance for Scottish development, as will be discussed further in chapter 6 below.

5.2.2 Trade with England, c. 1760

The following will, as has the discussion in chapter 4, rely on "speculative arithmetic", based (with exceptions) not upon recorded statistics but estimates made by well-informed contemporaries. It will furthermore exclusively discuss exports, as nothing is known about Scottish imports from England post-1707.

These estimates quantified linen exports to England in 1765 in the order of £300,000 Sterling.[49] To this the following items, of which one can be reasonably confident, can be added, in order to prove the point of a constant share of exports to England in total foreign exports from Scotland 1700-1760.

£300,000 Sterling (linen),

(+) cattle exports in the same year to England at £80,000 Sterling (the average yearly figure quoted by contemporaries in the mid-1750s, valued in very conservative terms at an average value of £1 10s per head);

(+) an average number of 150,000 sheep, ranging from £0.23 to £0.95 Sterling per head in value, yielding a minimum value of £34,375 and a maximum value of £142,500 Sterling;

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49 See references given in Table 23.

(+) exports of coal to London, which in 1765 amounted to 6,378 tons or £6,378 Sterling at official 1755 values;

(=)£514,816 Sterling. In that case exports from Scotland to England would in 1765 in fact have exceeded officially recorded exports from Scotland *overseas* by about £114,000 Sterling, disregarding all other possible "exports" to England.[50] This makes the present figure (Table 23 below) a lower-bound estimate.

Table 23: "Exports" from Scotland to England in 1765

Linen: Durie, "Markets," p. 36; Cattle: A. J. Koufopoulos, The Cattle Trades of Scotland, 1603-1745 (University of Edinburgh PhD thesis, Edinburgh, 2005), Appendix; Sheep: A. R. B. Haldane, *The Drove Roads of Scotland* (1997 ed., Edinburgh, 1997), p. 192; Coal: B. F. Duckham, *A History of the Scottish Coal Industry*, Vol. I. *1700-1815. A Social and Industrial History* (Newton Abbot, 1970), Appendix II, p. 366. Prices taken from A. J. S. Gibson and T. C. Smout, *Prices, Food and Wages in Scotland 1550-1780* (Cambridge, 1995), Tab. 6.14-15 (p. 215).

	Valuation	Amount shipped	Total Value (£Sterling)
Linen	ad valorem	-	£300,000
Cattle	£1 10s Sterling per head	80,000	£120,000
Sheep	55s - 228s (Scots) per head	150,000	£88,438a
Coal to London	£1 Sterling per ton	6,378	£6,378
Sum Total			£514,816
Total domestic exports overseas	Official 1755 values		£400,928

a = Arithmetic mean of lowest (ewes) and highest quote (wedders)

Factoring this information into the picture of the overseas trades as sketched above, the following – hypothetical – composition and distribution of total Scottish exports (overseas exports including exports to England) obtains:

50 Such as linen yarn, lead, lead ore, coal sent to the English outports etc.

Table 24: Total Exports from Scotland, 1765

	England	North America	Caribbean	Denmark&Norway	Holland	Ireland	Remaining	TOTALS	SUM EXPORTS
Linen	£300,000	£62,912	£20,799	£13	£24	£44,185	160	£128,093	£428,093
Cattle	£120,000							£0	£120,000
Sheep	£88,438							£0	£88,438
Coal	£6,378	£336	£47	£1,826	£1,578	£4,137	1538	£9,462	£15,840
	Per cent of total exports								
Linen	33%	7%	2%	0.00%	0.00%	5%	0	14%	47%
Cattle	13%								13%
Sheep	10%								10%
Coal	1%	0.04%	0.01%	0.20%	0.17%	0.45%	0.13%	1%	2%
Totals	56%	15%	5%	3%	9%	8%	4%	44%	100%
	Per cent of commodity exported								
Linen	70%	15%	5%	0.00%	0.01%	10.32%	0%	30%	100%
Cattle	100%								100%
Sheep	100%								100%
Coal	40%	2%	0.30%	12%	10%	26%	9.70%	60%	100%

According to this calculation example, in 1765 the American market for Scottish products obtains at just under 20 per cent of total Scottish domestic exports. Almost three times this amount went to England on the other hand, as did 70 per cent of total linen exports. (Only about 10 per cent of linen exports went directly to the Americas, although it needs to be assumed that most of the linens exported to England were destined for the colonies as well). About one-fifth of total domestic exports were livestock, and one-third were linens. Needless to say that this exercise relies almost entirely upon speculation and economic imagination. But as all *valuations* applied tend to be lower-bound, and not all possible exports to England are covered by this calculation, the above figures represent an *absolute minimum figure* for the English link in and around 1760.

In the end, as well as by definition, this evidence clearly demonstrates that over the entire period 1700-1760 (and beyond) the English market retained the significance for the Scottish economy it had had "at the eve of Union". So did the traditional mainstays of the traditional Scottish export economy, cattle and linen, in terms of their shares in total exports from Scotland. England thus represented the single largest foreign destination for Scottish exports of domestic produce. About 80 per cent of Scottish exports went to European destinations in 1765 still.

This affords two preliminary conclusions. First, the European link of Scotland's trade was as strong in 1760 as it had been in 1700. The emerging dynamics of the colonial trades in Scotland's western ports had not yet altered the foreign trade pattern in terms of relative numbers, even though in terms of absolute

numbers, the colonial trades had grown considerably since c. 1736, as has been shown above.[51] Secondly, the available Scottish overseas trade statistics[52] do in fact not accurately reflect the mainstays of Scotland's economic activity or comparative (or absolute) advantage, as they fall short of a significant share of Scotland's domestic output that was traded abroad. If this framework is accepted, the omission of Anglo-Scottish trade might lead to an over-appreciation of the role of the *colonial trades* (imports and re-exports of tobacco and sugar, exports of linen to the colonies) in terms of their imputed consequences for Scotland's long-term economic development prior to the 1760s and 1770s. These aspects will be looked at further in chapter 6.

The discussion will now turn to a brief analysis of the distribution of the Scottish trade volume across the several Scottish ports and regions. It is based on the present author's evaluation of the full set of Scottish customs accounts, 1754 and 1755.[53]

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51 Chapter 4, sections 4.3.2.1-3.
52 TNA, Customs 14.
53 The Sterling values have been obtained by valuing the physical amounts of commodities given in the Scottish port books at their 1755 prices employed in the Inspector General's trade statistics. For a full discussion of sources and methods see ch. 3 above.

5.3 The Distribution of the Scottish Trade Volume (II): Scottish Regions and Ports, 1754-5

Mid-twentieth century growth theory and development economics have established the significance of unbalanced growth across key sectors of the economy (or key branches within the industrial sector) in an explanatory framework for intensive economic growth leading to industrialization.[54] *Regionally imbalanced growth* within countries, with leading and stagnant regions coexisting side by side, was subsequently added to the analytical bundle of criteria and is now held to be amongst the key explanations for observable growth and industrialization processes.[55] Whilst the analytical framework on which these accounts are based, usually refer to a nineteenth-century continental European contingency matrix applicable to industrialization processes, Kaufhold has demonstrated that the heuristic concept of regionally imbalanced growth can in fact be projected backwards to the mid-1600s at least.[56] Therefore it might be worthwhile applying such a heuristic framework to eighteenth-century Scottish *commercial* activity, if it is accepted that commerce ranged amongst, or in fact was, Scotland's most dynamic branch(es) of economic activity, 1700-1760. Tracing commercial regions across Scotland and examining possibly different trading patterns prevailing across these regions therefore will facilitate overall conclusions in the following chapter (chapter 6) on trade's role in Scotland's society and economy.

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54 W. W. Rostow, *The Process of Economic Growth* (New York, 2nd ed., 1962); Id., *Stages of Economic Growth* (Cambridge, 2nd ed., 1971). H. Leibenstein, *Economic Backwardness and Economic Growth. Studies in the Theory of Economic Development* (New York, 1963). For a brief survey of the subsequent criticisms of Rostow's model, see T. Pierenkemper, *Wirtschaftsgeschichte. Eine Einführung – oder: Wie wir reich wurden* (Munich - Vienna, 2005), pp. 157-60.

55 S. Pollard, "Industrialization and the European Economy," in: *EcHR*, Second Series, XXVI (1973), pp. 636-648; Id., *Peaceful Conquest. The Industrialization of Europe 1760-1970* (Oxford, 1981). For nineteenth-century *Germany*, see R. Fremdling, T. Pierenkemper and R. H. Tilly, "Regionale Differenzierung in Deutschland als Schwerpunkt wirtschaftshistorischer Forschung" in: R. Fremdling and R. H. Tilly (eds.), *Industrialisierung und Raum. Studien zur regionalen Differenzierung im Deutschland des 19. Jahrhunderts* (Stuttgart, 1979), pp. 9-26; and general survey on that topic in Pierenkemper, *Wirtschaftsgeschichte*, pp. 132-148.

56 K.-H. Kaufhold, "Gewerbelandschaften in der frühen Neuzeit (1650-1800)" in: H. Pohl (ed.), *Gewerbe und Industrielandschaften vom Spätmittelalter bis ins 20. Jahrhundert* (Stuttgart, 1986), pp. 112-202.

Due to the nature and extent of the source material, only the full run of Scottish customs accounts for 1754 and 1755 could be examined. Therefore the following is again to be understood as an agenda for further research, rather than being analytically comprehensive and definitive._And again, on a side note it might be stated that the source material puts Scotland at a "comparative advantage" for historical analysis, as the incompleteness of the English sources does not allow this type of analysis for England in the period under consideration.

5.3.1 Regions

In the eighteenth century one might distinguish three commercial regions in Scotland with profoundly distinct trading patterns.

(a) The **Firth of Forth** and East Coast ports were dominated by the port of *Leith* and its commercial activity. Trade was tied mainly to its traditional "avenues" (Scandinavia, Baltic, and Continental Europe). The main commodities imported were timber from Scandinavia, flax, hemp, and iron from Russia and the Netherlands, wines from Spain, Portugal and France. The main exports from this region were lead and coal, some woollens and sometimes grain, the main products of the soil and labour of the adjacent countryside. Re-exports played an overall insignificant role for this commercial region.

(b) The **Firth of Clyde** / South-west of Scotland. Glasgow (Port Glasgow, Greenock) and her satellite ports, which catered for the Atlantic trades, were on the other hand heavily involved in the re-export trades. Trade was dominated by the Glaswegian ports, serving a capital intensive and risky business with the Americas (tobacco from the mainland, sugar and by-products of the sugar industry from the Caribbean). Regarding the financial (capital) as well as the physical volume (tonnage of ships) involved, these trades by far surpassed the traditional trades of Scotland's east coast. The not

inconsiderable trade with Ireland[57] was centred in and around Glasgow as well and involved the minor ports in the West.

(c) The other ports in the **North / Northwest** (Orkneys, Shetlands, Hebrides) were of negligible importance in aggregate terms. The Shetlands were a large exporter of sea fish, which was of predominance for this area in regional terms; their largest market was Germany, and after the 1750s increasingly Ireland.

In fact, according to the minor importance of classification (c), it seems to be more reasonable to speak of a broadly ***dual system of trade*** in eighteenth century Scotland. With respect to (i) commodities, (ii) ports, and (iii) trading partners, this trading pattern was very different from the medieval and early modern one prior to c.1700.[58] Its beginnings almost certainly pre-date the Union 1707.

57 Beef for exportation / ships' provisions for trips to America, linen imported duty free to be sold in the Americas; re-exportation of tobacco, sugar and rum from Glasgow to Ireland.

58 E.g. M. Rorke, Scottish Overseas Trade 1275/86-1597 (Unpubl. Univ. of Edinburgh PhD thesis, 2 Vols., Edinburgh, 2001). T. C. Smout, The Overseas Trade of Scotland with Particular Reference to the Baltic and Scandinavian Trades 1660-1707 (Unpubl. University of Cambridge PhD thesis, Cambridge, 1959). Id., *Scottish Trade on the Eve of Union 1660-1707* (Edinburgh - London, 1963). J. C. Watson, Scottish Overseas Trade, 1597-1645, 2 Vols. (Unpubl. University of Edinburgh PhD Thesis, Edinburgh, 2005)

The regional break-down of the 1754 and 1755 trade volume (GTT) on the basis of the customs accounts affords the following information.

Table 25: The Scottish Volume of Trade in 1754 and 1755 by Scottish Regions

1754

	EAST		WEST		HIGHLANDS&ISLANDS		TOTALS
	Sterling	%	Sterling	%	Sterling	%	Sterling
GTT	£425,494	31%	£902,305	65%	£53,585	4%	£1,381,383
Imports	£237,507	44%	£283,002	53%	£14,845	3%	£535,354
Exports	£128,246	46%	£121,054	43%	£30,090	11%	£279,390
Re-export	£59,741	11%	£498,249	88%	£8,649	2%	£566,639
Total Exp	£187,987	22%	£619,303	73%	£38,739	5%	£846,029

1755

	EAST		WEST		HIGHLANDS&ISLANDS		TOTALS
	Sterling	%	Sterling	%	Sterling	%	Sterling
GTT	£380,776	36%	£629,416	60%	£37,060	4%	£1,047,252
Imports	£202,123	43%	£254,209	54%	£14,764	3%	£471,096
Exports	£137,897	46%	£147,403	49%	£15,030	5%	£300,330
Re-export	£40,756	15%	£227,803	83%	£7,266	3%	£275,825
Total Exp	£178,653	31%	£375,206	65%	£22,296	4%	£576,155

Source: NAS, *Customs Collectors' Quarterly Accounts* ("port books"): E504/1/5-6 (Aberdeen), E504/2/2-3 (Alloa), E504/3/2-3 (Anstruther), E504/4/2 (Ayr), E504/6/4 (Bo'ness), E504/7/2 (Caithness-Thurso); E504/8/2 (Campbeltown); E504/9/2 (Dumfries); E504/10/3 (Dunbar); E504/11/3 (Dundee); E504/12/2 (Fort William); E504/15/7 (Greenock); E504/17/2 (Inverness); E504/18/3 (Irvine); E504/20/3 (Kirkcaldy); E504/21/2 (Kirkcudbright); E504/22/6-7 (Leith); E504/24/3 (Montrose); E504/26/2-3 (Orkney-Kirkwall); E504/27/3 (Perth); E504/28/7 (Port Glasgow); E504/29/2-3 (Portpatrick); E504/30/2 (Prestonpans); E504/32/2 (Shetland-Lerwick); E504/34/2 (Stranraer); E504/37/2 (Wigtown). The commodities have been valued according to the 1755/57 pricing schedule found in the Inspector General's Ledgers of Imports and Exports (TNA, Custom 14). EAST: Alloa, Anstruther, Bo'ness, Dunbar, Dundee, Kirkcaldy, Leith, Montrose, Perth, Prestonpans. WEST: Ayr, Campbeltown, Dumfries, Greenock, Irvine, Kirkcudbright, Port Glasgow, Portpatrick, Stranraer, Wigtown. HIGHLANDS&ISLANDS: Caithness, Fort William, Inverness, Orkney, Shetland.

The shape of this distribution was determined by the un-proportionally large weight of only three ports in terms of gross total trade handled: Greenock (31 per cent, 1754; 29 per cent, 1755), Port Glasgow (22 per cent, 1754; 23 per cent, 1755), and Leith (15 per cent, 1754 and 1755). Due this extremely skewed distribution, the remaining 23 Scottish outports (customs precincts) were mostly negligible.

Figure 3: Rank Distribution of Scottish Outports by Gross Total Trade, 1754 (£Sterling)
Source: as preceding table.

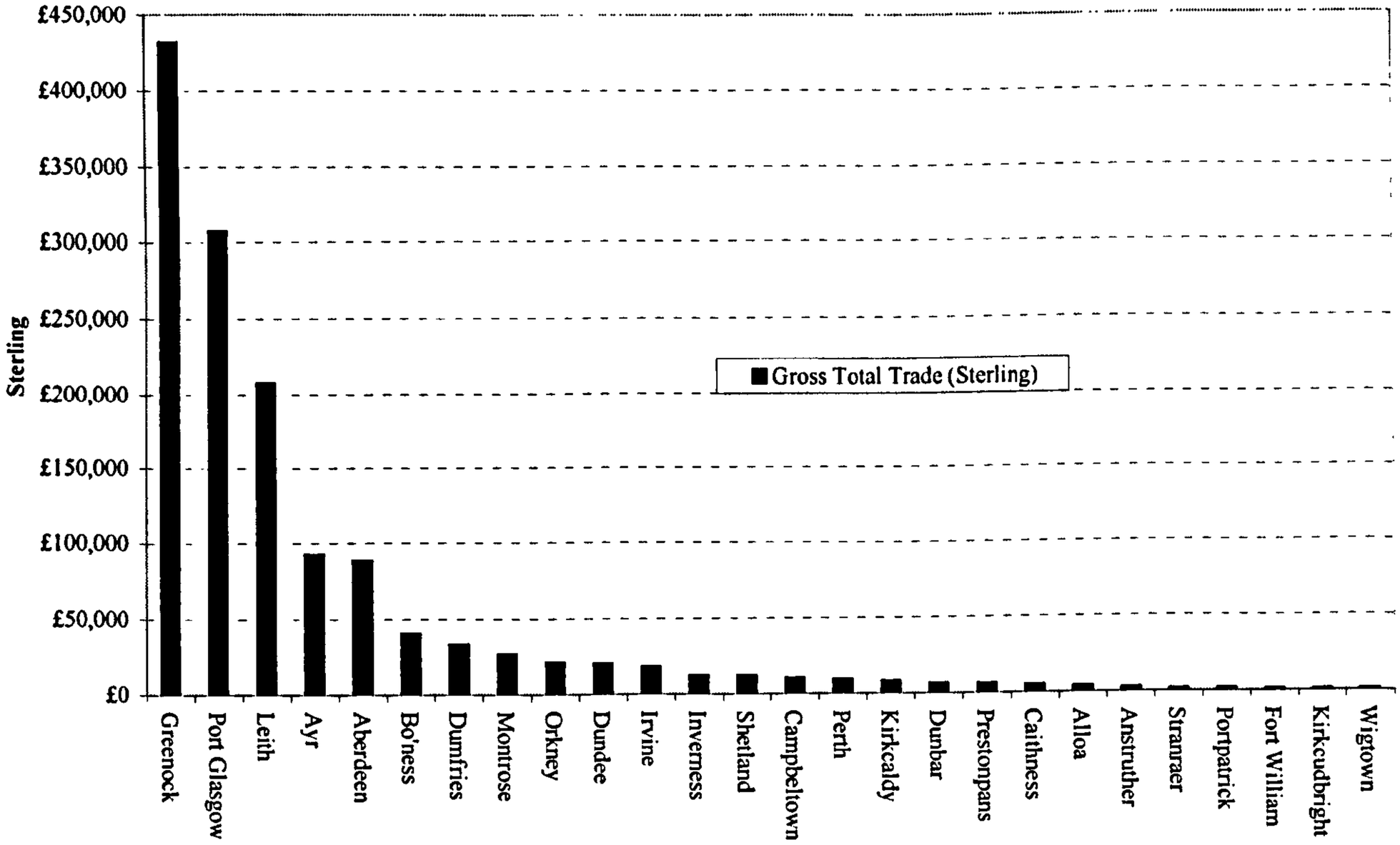
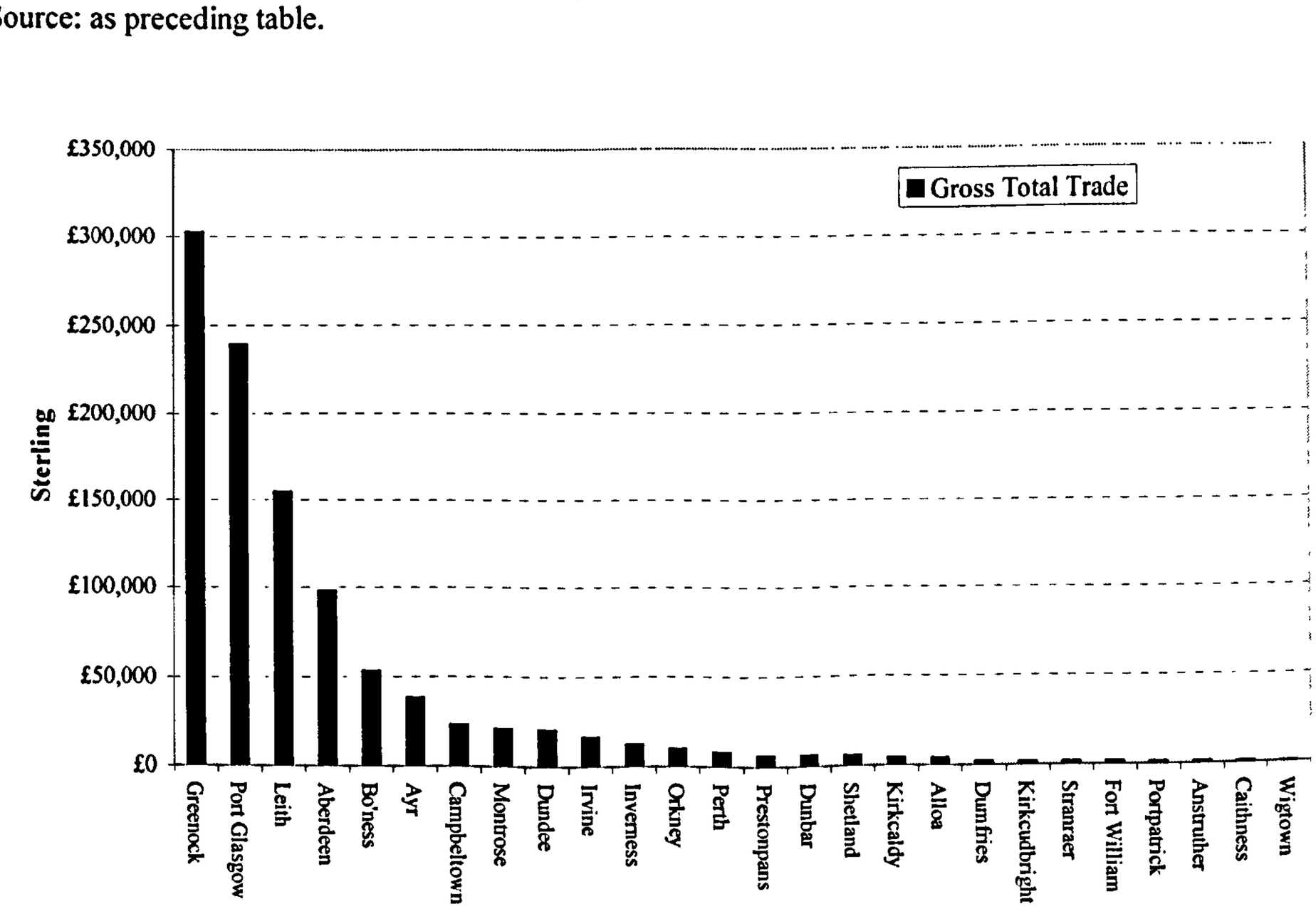


Figure 4: Rank Distribution of Scottish Outports by Gross Total Trade, 1755 (£Sterling)
Source: as preceding table.



The distribution was roughly similar in both years examined (but 1755 might not be representative, as it represented a slump year in Scotland's gross overseas trade). As noted previously, two distinct economic areas emerge from these figures.

5.3.2 Glasgow

The Glasgow outports dominated the picture unfolding with regard to the Western region, with a total of 53 per cent of gross total trade handled in 1754 and 52 per cent in 1755 (82 per cent of the Western GTT, 1754; 87 per cent 1755). Theirs was an entrepôt business, centred on the importation and re-exportation of tobacco and sugar (together accounting for 78 per cent of total imports and 88 per cent of their total re-exports, 59 per cent of their total exports in 1755) and some other enumerated commodities. The markets for both supply and demand were mostly located abroad. Amongst exports, textile manufactures, mainly plain Irish and Scotch linens, as well as "woollendries" dominated (Tables 26, 27). The main markets for these were the American colonies. Apart from linens and woollens, the large ships bound for the West Indies and continental America regularly also carried a variety of other manufactures such as cotton textiles, iron tools and other iron manufactures, wrought copper, tin and pewter, leather goods, saddles, shoes, haberdashery, candles, coals, fish etc. Compared to woollen and linen manufactures, however, other manufactures attained only very low shares in total exports to the Americas.

Table 26: The Composition of the Trade Volume of Glasgow, 1754

Greenock&Port Glasgow

1754		*Imports*	*% of Comm*	*% of Totals*	*Exports*	*% of Comm*	*% of Totals*	*Re-exports*	*% of Comm*	*% of Totals*
(1) Grocery&Beverages	*Tobacco (raw)*	£138,956	85%	62%				£392,484	100%	93%
	Roll Tobacco				£22	2%	0%	£1,103	0%	0%
	Snuff				£123	9%	0%	£45	0%	0%
	Sugar refined white				£1,205	84%	1%			
	Muscovado	£20,952	13%	9%				£45	0%	0%
	Wine	£1,831	1%	1%				£389	0%	0%
	Tea									
	Other	£1,753	1%	1%	£78	5%	0%			
(2) Textile Inputs	*Flax*	£1,028	14%	0%						
	Hemp	£2,131	28%	1%						
	Thread	£68	1%	0%	£1,176	99%	1%			
	Raw Cotton	£4,336	57%	2%				£206	78%	0%
	Other	£48	1%	0%	£7	1%	0%	£59	22%	0%
(3) Textile Manufactures	*Narrow German*	£3,325	19%	1%				£12,193	58%	3%
	Plain Irish Linen	£11,064	64%	5%				£6,534	31%	2%
	Plain Linen	£980	6%	0%	£30,388	45%	32%			
	Plain Handkerchiefs	£12	0%	0%	£10,074	15%	10%			
	Chequered striped Linen	£20	0%	0%	£977	1%	1%			
	Printed Linen		0%		£1,385	2%	1%			
	Sailcloth		0%		£165	0%	0%			
	other Linen	£1,849	11%	1%	£1,092	2%	1%	£2,145	10%	1%
	Totals Linen	£17,250	100%	8%	£44,081	65%	46%	£20,872	100%	5%
	Cotton Cloth				£4	0%	0%			
	Silks				£75	0%	0%			
	Woollens				£9,273	14%	10%			
	Haberdashery				£8,393	12%	9%			
	Hats				£2,886	4%	3%			
	Shirts				£65	0%	0%			
	Thread Stockings				£2,956	4%	3%			
	Other	£83	0%	0%	£299	0%	0%			
(4) Wood/Timber	*Ordinary Deals*	£4,447	33%	2%						
	Mahogany	£866	6%	0%				£450	32%	0%
	Oak Plank Timber	£2,040	15%	1%				£330	23%	0%
	Staves	£4,816	36%	2%				£631	44%	0%
	Other	£1,372	10%	1%	£3	100%	0%	£16	1%	0%
(5) Vegetable Products	*Rice*	£1	0%	0%						
	Oatmeal Oats	£2,899	46%	1%	£5	5%	0%			
	Lintseed	£3,324	53%	1%						
	Other	£69	1%	0%	£94	95%	0%			
(6) Iron/Metals	*Bar Iron*	£5,109	89%	2%	£47	1%	0%			
	Old Iron	£156	3%	0%						
	Wrought Iron / Iron Man	£118	2%	0%	£4,718	84%	5%			
	Other	£372	6%	0%	£877	16%	1%			
(7) Minerals	*Salt*	£587	24%	0%						
	Coal				£95	64%	0%			
	Ashes	£494	20%	0%						
	Pitch Tar	£1,349	54%	1%				£9	100%	0%
	Other	£46	2%	0%	£53	36%	0%			
(9) Dyestuffs/"Drugs"	*Tallow Candles*				£460	95%	0%			
	Other	£1,164	100%	1%	£23	5%	0%	£15	100%	0%
(10) Animal Products	*Beef*				£40	0%	0%	£3,504	99%	1%
	Herring				£9,232	88%	10%			
	Cod									
	Human Hair				£1,138	11%	1%			
	Other	£43	100%	0%	£70	1%	0%	£39	1%	0%
(11) Skins/Hides/Leather	*Cow Hides*	£4,959	93%	2%						
	Calve Skins	£310	6%	0%						
	Leather Man.				£6,519	100%	7%			
	Other	£43	1%	0%						
(12) Animal&Vegetable Fats	*Train Oil*	£438	77%	0%						
	Other	£132	23%	0%						
(13) Other/Remaining		£545	100%	0%	£2,151	100%	2%			

Table 27: The Composition of the Trade Volume of Glasgow, 1755

Greenock&Port Glasgow

		Imports			*Exports*			*Re-exports*		
			% of Com-modity Class	*% of Totals*		*% of Com-modity Class*	*% of Totals*		*% of Com-modity Class*	*% of Totals*
(1) Grocery&Beverages	*Tobacco (raw)*	£126,365	78%	58%			0%	£177,889		83%
	Roll Tobacco						0%	£2,832		1%
	Snuff				£118	7%	0%	£2		0%
	Sugar refined white				£1,523	90%	1%			0%
	Muscovado	£31,618	20%	14%			0%	£9,449		4%
	Wine	£1,379	1%	1%			0%	£348		0%
	Tea		0%				0%	£1,796		1%
	Other	£1,715	1%		£59					
(2) Textile Inputs	*Flax*	£1,751	19%	1%			0%			0%
	Hemp	£2,036	23%	1%			0%			0%
	Thread				£2,247		2%			0%
	Raw Cotton	£5,178	58%	2%			0%			0%
	Other	£35	0%		£71					
(3) Textile Manufacture:	*Narrow German*	£4,880	28%	2%			0%	£14,106		7%
	Plain Irish Linen	£11,716	66%	5%			0%	£593		0%
	Plain Linen				£25,527		23%			0%
	Plain Handkerchiefs				£13,261		12%			0%
	Chequered striped Linen				£2,306		2%			0%
	Printed Linen				£3,242		3%			0%
	Sailcloth	£23	0%	0%	£3,949		4%			0%
	other Linen				£1,939		2%			
	Totals Linen	*£17,603*	100%	*8%*	*£50,223*	*62%*	*46%*	*£16,346*		*8%*
	Cotton Cloth				£26	*0%*	0%			0%
	Silks				£62	*0%*	0%			0%
	Woollens	£2	0%	0%	£12,306	*15%*	11%			0%
	Haberdashery				£8,995	*11%*	8%			
	Hats				£4,345	*5%*	4%			
	Shirts				£3,332	*4%*	3%			
	Thread Stockings	£65	0%		£1,964	*2%*	2%			
	Other	£65	0%		£314					
(4) Wood/Timber	*Ordinary Deals*	£3,405	23%	2%			0%			0%
	Mahogany	£1,052	7%	0%			0%	£150		0%
	Oak Plank Timber	£4,059	27%	2%			0%			0%
	Staves	£5,364	36%	2%			0%	£143		0%
	Other	£938	6%	0%	£7		0%			0%
(5) Vegetable Products	*Rice*	£1,972	37%	1%			0%	£517		0%
	Lintseed	£3,269	62%	1%			0%			0%
	Other	£18	0%	0%	£84		0%			0%
(6) Iron/Metals	*Bar Iron*	£2,037	92%	1%			0%			0%
	Old Iron	£173	8%	0%						
	Wrought Iron			0%	£2,893	63%	3%			0%
	Other	£0	0%	0%	£1,706		2%			0%
(7) Minerals	*Salt*	£541	51%							0%
	Coal		0%		£245					0%
	Ashes	£154	15%				0%			0%
	Pitch Tar	£317	30%				0%			0%
	Other	£47	4%	0%	£62		0%			0%
(9) Dyestuffs/"Drugs"	*Tallow Candles*			0%	£1,000	95%	1%			0%
	Other	£794		0%	£48		0%			0%
(10) Animal Products	*Beef*			0%	£19	0%	0%	£4,483		2%
	Herring			0%	£9,411	94%	9%			0%
	Cod			0%	£134	1%	0%			0%
	Human Hair	£44	42%	0%	£438	4%	0%			0%
	Other	£62	59%		£10					
(11) Skins/Hides/Leather	*Cow Hides*	£3,918	87%	2%			0%			0%
	Calve Skins	£552	12%	0%			0%			0%
	Leather Man.	£7	0%		£6,413	100%				
	Other	£31	1%							
(12) Animal&Vegetable	*Train Oil*	£1,847	99%	1%			0%			0%
	Other	£27	1%	0%			0%			0%
(13) Other/Remaining				0%	£1,121		1%			0%

5.3.3 Leith

Leith was the third biggest port and indicative of economic activity in the eastern region of Scotland. Its trade was geared towards the importation of mainly flax and timber items, as well as wine destined for the consumption of Edinburgh's upper classes. Its export business was dominated by bar lead, as two of Scotland's largest producers (Duke of Queensberry, Earl of Hopetoun) lay close-by with direct road transport to Edinburgh/Leith. Their exemption by private grant of the applicable export duty (Old Subsidy Outwards) of £1 Sterling per ton without doubt stimulated the bar lead trade, most of which had a Dutch port (Veere, Rotterdam) as a final destination.[59] Re-exports were dominated by tobacco and sugar, in a similar way as in Glasgow's case (Tables 28, 29). Overall, however, re-exports were not an important branch of Leith and the East's commercial activity. In terms of imports and exports, Leith was therefore more firmly rooted in domestic activity than the Glaswegian emporium.

Table 28: The Structure of Leith's Overseas Trade Volume in 1754 (Commodities)

59 Present chapter, section 5.1.1.1 above.

		Imports			*Exports*			*Re-exports*		
			% of Comm	*% of Totals*		*% of Comm*	*% of Totals*		*% of Comm*	*% of Totals*
(1) Grocery&Beverages	*Tobacco*	£13,296	25%	13%	£232	73%	0%	£26,510	93%	86%
	Wine	£31,320	59%	29%				£1,422	5%	5%
	Sugars	£4,336	8%	4%	£32	10%	0%	£8	0%	0%
	Oranges Lemons	£1,851	3%	2%						
	Tea							£97	0%	0%
	Other Grocery	£2,734	5%	3%	£52	16%	0%	£531	2%	2%
(2) Textile Inputs	*Flax (undr.)*	£20,774	83%	20%						
	Hemp	£3,016	12%	3%						
	Tow	£21	0%	0%	£35	10%	0%			
	Other Textile Inp.	£1,206	5%	1%	£317	90%	0%			
(3) Textile Manufactures	*Narrow German*	£1,397	66%	1%				£713	34%	2%
	French Cambrics							£167	8%	1%
	Plain Linen	£130	6%	0%	£4,966	39%	7%	£746	36%	2%
	Lawns	141	7%	0%	£419	3%	1%	£369	18%	1%
	Sailcloth	£16	1%	0%	£659	5%	1%			
	Calicoes							£62	3%	0%
	Shirts	£211	10%	0%	£1,545	12%	2%			
	Stockings				£254	2%	0%			
	Other	£229	11%	0%	£4,862	38%	7%	£22	1%	0%
(4) Wood/Timber	*Ordinary Deals*	£2,947	23%	3%						
	Mahogany	£5,587	43%	5%						
	Staves	£948	7%	1%						
	Balks	£261	2%	0%						
	Fir Timber	£536	4%	1%						
	Other	£2,677	21%	3%						
(5) Vegetable Products	*Lintseed*	£1,809	84%	2%				£72	77%	0%
	Barley				£1,855	86%	3%			
	Other	£352	16%	0%	£306	14%	0%	£22	23%	0%
(6) Iron/Metals	*Bar Unwrought*	£3,457	88%	3%						
	Old Iron	£360	9%	0%						
	Pig Iron	£28	1%	0%						
	Bar Lead				£51,326	98%	72%			
	Other	£102	3%	0%	£1,239	2%	2%			
(7) Minerals	*Salt*	£23	1%	0%				£36	100%	0%
	Coal				£170	77%	0%			
	Ashes	£1,076	31%	1%						
	Pitch Tar	£2,232	64%	2%						
	Saltpetre	£137	4%	0%						
	Other	£1	0%	0%						
(9) Dyestuffs"Drugs"	*Indigo*	£76	6%	0%						
	Madder	£236	20%	0%						
	Other	£863	73%	1%	£50	23%	0%			
(10) Animal Products	*Herring*				£82	10%	0%			
	Salmon				£229	29%	0%			
	Whale Fins									
	Other	337	100%	0%	£485	61%	1%			
(11) Skins/Hides/Leather	*Leather Manufactures*				£747	100%	1%			
	Other	£11	100%	0%						
(12) Animal&Vegetable Fats	*Whale Oil*	£33	4%	0%	£602	100%	1%			
	Other	£864	96%	1%						
(13) Other/Remaining		£649	100%	1%	£835	100%	1%			

Table 29: The Structure of Leith's Overseas Trade Volume in 1755 (Commodities)

		Imports			*Exports*			*Re-exports*		
			% of Comm	*% of Totals*		*% of Comm*	*% of Totals*		*% of Comm*	*% of Totals*
(1) Grocery&Beverages	*Tobacco*	£5,312	36%	8%	£265	86%	0%	£13,816	88%	80%
	Wine	£4,308	29%	6%				£376	2%	2%
	Sugars	£678	5%	1%				£204	1%	1%
	Oranges Lemons	£1,642	11%	2%					0%	0%
	Tea			0%				£632	4%	4%
	Other Grocery	£2,929	20%	4%	£45	14%	0%	£619	4%	4%
(2) Textile Inputs	*Flax (undr.)*	£21,387	91%	32%						
	Hemp	£1,581	7%	2%						
	Tow	£136	1%	0%	£325	85%	0%			
	Other Textile Inp.	£354	2%	1%						
(3) Textile Manufactures	*Narrow German*	£1,585	48%	2%						
	French Cambrics	£830	25%	1%				£865	58%	5%
	Plain Linen				£330	13%	0%			
	Lawns				£444	18%	1%			
	Sailcloth				£340	14%	0%			
	Calicoes							£543	36%	3%
	Shirts				£446	18%	1%			
	Stockings				£205	8%	0%			
	Other	£876	27%	1%	£716	29%	1%	£92	6%	1%
(4) Wood/Timber	*Ordinary Deals*	£3,897	49%	6%						
	Mahogany	£571	7%	1%						
	Staves	£757	10%	1%						
	Balks	£561	7%	1%						
	Fir Timber	£556	7%	1%						
	Other	£1,596	20%	2%						
(5) Vegetable Products	*Linseed*	£2,485	86%	4%						
	Barley				£535	96%	1%			
	Other	£401	14%	1%	£23	4%	0%			
(6) Iron/Metals	*Bar Unwrought*	£3,690	76%	5%						
	Old Iron	£917	19%	1%						
	Pig Iron	£206	4%	0%						
	Bar Lead				£64,430	99%	91%			
	Other	£40	1%	0%	£401	1%	1%	£3	100%	0%
(7) Minerals	*Salt*	£19	0%	0%	£67	34%	0%	£21	88%	0%
	Coal				£125	64%	0%			
	Ashes	£1,875	33%	3%						
	Pitch Tar	£2,085	37%	3%						
	Saltpetre	£1,703	30%	3%						
	Other	£1	0%	0%	£3	2%	0%	£3	12%	0%
(9) Dyestuffs/"Drugs"	*Indigo*	£138	16%	0%						
	Madder	£423	48%	1%						
	Other	£316	36%	0%	£32	100%	0%	£32	100%	0%
(10) Animal Products	*Herring*				£320	61%	0%			
	Salmon				£203	39%	0%			
	Whale Fins	£1,800	84%	3%						
	Other	£355	16%	1%						
(11) Skins/Hides/Leather	*Tanned Leather (incl. Manuf.)*				£362	100%	1%	£68	100%	0%
	Other	£5	1	0%						
(12) Animal&Vegetable Fa	*Whale Oil*	£1,090	89%	2%	£475	100%	1%			
	Other	£134	11%	0%						
(13) Other/Remaining		£461	100%	1%	£278	100%	0%	£7	100%	0%

Table 30: The Structure of Leith's Overseas Trade Volume (1754): Countries

	Imports	%	*Exports*	%	*Re-Exports*	%	*GTT*	%
Africa	£525	0%					£525	0%
North America	£19,511	18%	£7,867	11%	£1,827	6%	£29,205	14%
Caribbean	£12,636	12%	£7,289	10%	£1,038	3%	£20,963	10%
Denmark/Norway	£9,851	9%	£314	0%	£3,117	10%	£13,282	6%
France			£2,506	4%	£15,672	51%	£18,178	9%
Germany	£1,844	2%	£844	1%	£50	0%	£2,738	1%
Gibraltar	£60	0%	£153	0%	£32	0%	£245	0%
Greenland								
Guernsey	£8,763	8%					£8,763	4%
Holland	£14,382	14%	£45,645	64%	£8,812	29%	£68,839	33%
Poland (Danzig)	£1,320	1%	£1,059	1%	£85	0%	£2,464	1%
Portugal	£3,540	3%	£1,529	2%			£5,069	2%
Russia	£14,103	13%			£92	0%	£14,195	7%
Spain	£15,452	15%	£256	0%	£53	0%	£15,761	8%
Sweden	£3,431	3%	£3,608	5%			£7,039	3%
Other	£864	1%	£38	0%			£902	0%
TOTALS	£106,282	100%	£71,108	100%	£30,778	100%	£208,168	100%

Table 31: The Structure of Leith's Overseas Trade Volume (1755): Countries

	Imports	%	*Exports*	%	*Re-Exports*	%	*GTT*	%
Africa	£159	0%					£159	0%
North America	£10,488	15%	£995	1%	£412	2%	£11,895	8%
Caribbean	£3,710	5%	£2,115	3%	£259	1%	£6,084	4%
Denmark/Norway	£3,851	6%	£1,110	2%	£1,740	10%	£6,701	4%
France	£942	1%					£942	1%
Germany	£2,014	3%	£2,417	3%	£1,127	7%	£5,558	4%
Gibraltar			£157	0%	£43	0%	£200	0%
Greenland	£2,886	4%					£2,886	2%
Guernsey	£765	1%					£765	0%
Holland	£18,241	27%	£56,242	80%	£13,671	79%	£88,154	57%
Poland (Danzig)	£3,903	6%	£2,709	4%	£34	0%	£6,645	4%
Portugal	£2,812	4%	£318	0%		0%	£3,130	2%
Russia	£10,163	15%	£280	0%	£6	0%	£10,449	7%
Spain	£1,828	3%	£278	0%		0%	£2,106	1%
Sweden	£5,878	9%	£3,798	5%		0%	£9,676	6%
Other	£58	0%					£58	0%
TOTALS	£67,697	100%	£70,418	100%	£17,291	100%	£155,407	100%

If the evidence cited in the preceding paragraphs as to the dualistic trade pattern of the two regions (East/West) is accurate, it would also imply a likewise clear-cut geographical structure of the trade volume in terms of countries Scotland traded with. In fact, the pattern is repeated. The ports in the West were geared towards the Americas and Ireland, as well as their continental re-export markets for tobacco. And, it may be added, the region was part of a larger integrated economic

area, including the South-West of Scotland, North-Eastern Ireland, as well as the Isle of Man. In terms of countries Leith and the *East* traded with, the Netherlands dominated the picture, accounting for 57 per cent of Leith's GTT, followed by the Americas (12 per cent), Russia (7 per cent), and Sweden (6 per cent) (Tables 30, 31).

Around the middle of the eighteenth century therefore, the "West" of Scotland, whilst harbouring only about 14 per cent of the Scottish population[60], channelled about 60 per cent of Scotland's gross total overseas trade – if this very crude numerical relation can be used for comparison. In terms of overseas commerce, there was without doubt a heavy regional imbalance in Scotland towards the Glaswegian emporium in the South-west. Without doubt this had an impact on the distribution of potential for economic expansion across Scotland.[61] This underlines the aspect stressed *inter alia* by Pollard that economic growth and development are frequently regionally imbalanced. Detailed studies on the regional or port level, as have been produced for Aberdeen[62], Dundee[63], Glasgow[64] and Montrose[65], would be especially desirable for *Leith*. Shore dues' accounts have been preserved for the latter port since 1728[66], and customs accounts, allowing a full reconstruction of this port's trade balance, have survived since 1742/3. In combination with available excise production statistics, which distinguished taxed production between "Edinburgh" and the rest of Scotland, future researchers will be able to track regional patterns of production and trade across Scotland since 1707 and thus trace the regional imbalances in eighteenth-century growth processes in more detail.

The discussion will now proceed with an analysis of trade's role for the Scottish economy. Since a macro-economic history of eighteenth-century Scotland is

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60 A. Slaven, *The Development of the West of Scotland 1750-1960* (London, 1976), p. 58.
61 Ibid., *passim*.
62 G. Jackson, "The Economy: Aberdeen and the Sea" in: E. P. Dennison, D. Ditchburn and M. Lynch (eds.), *Aberdeen Before 1800. A New History* (East Linton, 2002), pp. 159-180.
63 C. A. Whatley, D. Swinfen and A. M. Smith, *The Life and Times of Dundee* (Edinburgh, 1993).
64 G. Jackson, "Glasgow in Transition, c.1660 to c. 1740" in: T. M. Devine and G. Jackson (eds.), *Glasgow*. Vol. I. *Beginnings to 1830* (Manchester - New York, 1995), pp. 63-105; and T. M. Devine, "The Golden Age of Tobacco" in ibid., pp. 139-183.
65 G. Jackson and S. G. E. Lythe (eds.), *The Port of Montrose: A History of its Harbour, Trade and Shipping* (Tayport, 1993); therein: I. D. Whyte, "'All Kynds of Graine': the Trade in Victual c. 1680-1825" (pp. 115-124); D. G. Adams, "Trade in the Eighteenth and Nineteenth Centuries" (pp. 125-149).
66 *Edinburgh City Archives*, Port of Leith Shore Dues Accounts, 1728seq. (unclassified).

still lacking, the discussion of possible trajectories for economic growth 1700-1760 will have to rely on proxies. These have been derived from sample examinations of macro-economic data by the present author which, due to the topical limitations of scale and scope for the present thesis however, could not be carried out as comprehensively as the available material would deserve. Nevertheless the central implications will come across as very robust and reliable.

6 Trade and Economic Growth, 1700-1760

"From the 1740s to the 1780s, the new free-trade area created by the Union was crucial, as can be seen from the two examples of the country's principal eighteenth-century industry, linen, and its most successful branch in overseas trade, tobacco. [...] Linen, therefore, was one case where the record shows the impact of Union to be clearly favourable in the long term. To some extent it was a similar story with tobacco. The 'golden age' of the Glasgow tobacco trades dates from the 1740s."[1]

"Linen, therefore, was one case where the record shows the impact of Union to be clearly favourable in the long term. To some extent it was a similar story with tobacco. The 'golden age' of the Glasgow tobacco trades dates from the 1740s [...]."[2]

"[T]he historian must take care to avoid having the availability of documents dictate what is and is not important in the economic life of the past".[3]

Having analyzed Scotland's pre-industrial trade pattern in terms of its emergence being co-determined by the new institutional superstructure (chapters 2, 3), its long-term trends, structure and changes therein 1700-1760 (chapters 4-5), the first part of the present work will now be drawn to a close by an analysis of trade's role in the Scottish economy, 1700-1760. This discussion is taken up for mainly four reasons.

(1) The eighteenth century is usually held in high regard amongst Scottish historians, who have generously dispensed labels such as "Empire", "Enlightenment", and "modern" to a very colourful set of phenomena related to differing aspects of human activity and scholarly disciplines, such as society, culture, politics, political economy, natural philosophy, to name but a few. Economic change is more difficult to pinpoint, as is the assessment of Scotland's macroeconomic performance, c.1700-1760.[4] In this regard the eighteenth century account has been

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1 T. M. Devine, "Scotland" in R. Floud and P. Johnson (eds.), *The Cambridge Economic History of Modern Britain*, Vol. I. *Industrialisation, 1700-1860* (Cambridge, 2004), pp. 388-416, at p. 402.

2 T. M. Devine, "The Modern Economy: Scotland and the Act of Union" in Id. and C. H. Lee and G. C. Peden (eds.), *The Transformation of Scotland. The Economy Since 1700* (Edinburgh, 2005), pp. 13-33, at p. 29.

3 J. De Vries, *The Economy of Europe in an Age of Crisis, 1600-1750* (Cambridge, 1976), p. 147.

4 Unfortunately, scholars are not normally in complete agreement as to the precise landmarks or turning-points in Scotland's (eighteenth-century) economic development. Their benchmark dates

credited with a variety of positive items as well: in terms of economic growth and the "transformation" of the economy towards a "modern" and "industrial" framework after the turn of the century. Yet a meaningful answer to the question of when modern economic growth commenced depends upon the chronological and conceptual framework chosen. In this context, overseas or foreign trade renders itself most useful for an economic analysis, as it is the only component of national income for which detailed statistical material of a remotely modern design has survived. More crucial, therefore, than establishing the mere commercial long-term trends and fluctuations is the correct assessment of trade's share in economic activity (GDP/GNP).

(2) Scholars have suggested different possible mechanisms of trade being an "engine of growth".[5] With regard to eighteenth century England, the bottom line of this reasoning has been that (i) an increase in the numbers and incomes of the

usually range from c.1740 to c.1780. If formulated emphatically, they coincide with what is regarded as the beginning of Scotland's "industrial revolution" and the commencement of Rostovian "modern economic growth". R. H. Campbell, *Scotland since 1707. The Rise of an Industrial Society* (Oxford, 1965), p. 29 and chs. I-IV in general. H. Hamilton, *An Economic History of Scotland in the Eighteenth Century* (Oxford, 1963), p. 1; C. A. Whatley, *The Industrial Revolution in Scotland* (Cambridge, 1997), p. 20, p. 24. I. D. Whyte, *Scotland before the Industrial Revolution. An Economic and Social History c. 1050 – c. 1750* (London - New York 1995), esp. pp. 328-333; Id., *Scotland's Society and Economy in Transition, c. 1500-c. 1760* (Basingstoke - London - New York, 1997), esp. p. 165; S. G. E. Lythe and J. Butt, *An Economic History of Scotland, 1100-1939* (Glasgow - London, 1975), p. 102f., p. 162; Devine, "Modern Economy".

5 K. Morgan, "Atlantic Trade and British Economic Growth in the Eighteenth Century" in P. Mathias and J. A. Davis (eds.), *The Nature of Industrialization,* Vol. 5. *International Trade and British Economic Growth from the Eighteenth Century to the Present Day* (Oxford - Cambridge, Mass., 1996), pp. 14-33, esp. p. 22f., Id., *Slavery, Atlantic Trade and the British Economy 1660-1800* (Cambridge, 2000), ch. 5. C. K. Harley, "Trade: Discovery, Mercantilism and Technology" in Floud & Johnson (eds.), *Cambridge Economic History,* Vol. I, pp. 175-203; W. A. Cole and P. Deane, "The Growth of National Incomes" in: H. J. Habakkuk and M. M. Postan (eds.), *The Cambridge Economic History of Europe,* Vol. VI/I. *The Industrial Revolutions and After: Incomes, Population and Technological Change* (Cambridge, 1965), pp. 1-55; Id., *British Economic Growth 1688-1959. Trends and Structure* (Cambridge, 2nd ed., 1967); D. C. North and R. P. Thomas, *The Rise of the Western World. A New Economic History* (Cambridge, 1973), in particular p. 22, p. 26; A. G. Kenwood and A. L. Lougheed, The *Growth of the International Economy 1820-1990* (London - New York, 3rd ed., 1993), esp. pp. 149-154. F. Braudel, *The Structures of Everyday Life.* Vol 1. *Civilization and Capitalism 15th – 18th Century* (London, 2002, pbk), p. 402, pp. 412-415, p. 440; Id., *The Wheels of Commerce.* Vol. 2. *Civilization and Capitalism 15th – 18th Century* (London, 2002, pbk), p. 408. Most recently Braudel's assumptions have been tested using econometric methods: D. Acemoglu, S. Johnson and J. A. Robinson, "The Rise of Europe: Atlantic Trade, Institutional Change and Economic Growth," Centre for Economic Policy Research Discussion Paper Nr. 3712 (January 2003), p. 2, 4. Cf. also P. Deane, *The First Industrial Revolution* (Cambridge - London - New York - Melbourne, 1967), p. 53, p. 58.

colonial population stimulated export demand for British goods. (ii) Dynamic spin-offs or lateral linkages arose from indirect gains of trade, such as an increase in commercial knowledge and practice, demand for and supply of banking services and capital, the improvement of means of credit and cashless transactions etc. Direct gains accrued from shipping and insurance services, which were usually provided by those active in the overseas trades on a mutual basis. (iii) Trade fuelled domestic economic growth by ways of re-invested profits (in the vicinity of dynamic ports, but leading to a general increase in total economic activity). Especially the last-mentioned hypothesis has been put forward forcefully for Scotland as well, but largely with regard to the period post-dating the 1770s.[6] Therefore the present work extends the analysis to the earlier period (1700-1760), in order to test whether this framework is applicable for this time as well.

(3) Furthermore, textbooks on "British" economic history usually approximate eighteenth-century British growth rates of trade and national income by using English evidence exclusively. They thus refrain from an analysis of Scottish economic performance, whilst still implying that Scotland ought to be viewed as part of the heuristic framework.[7] But at least an effort ought to be made to detect if, and to what extent, the Scottish commercial and economic pattern differed from English evidence. This is not least because Scotland – in the perception of contemporaries both now and then – continued to remain a separate country from England in almost all but customs and parliamentary purposes after 1707.[8]

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6 T. M. Devine, "The Colonial Trades and Industrial Investments in Scotland, c.1700-1815" in P. Emmer and F. Gaastra (eds.), *The Organization of Interoceanic Trade in European Expansion, 1450-1800* (Aldershot, 1996), pp. 299-312.

7 N. F. R. Crafts, "English Economic Growth in the Eighteenth Century: A Re-examination of Deane and Cole's Estimates," *EcHR*, Second Series, XXIX (1976), pp. 226-235; Id., "British Economic Growth, 1700-1831: A Review of the Evidence," *EcHR*, Second Series, XXXVI (1983), pp. 177-199; Id., *British Economic Growth during the Industrial Revolution* (Oxford, 1985), and summary in: Id., "The New Economic History and the Industrial Revolution" in P. Mathias and J. A. Davis (eds.), *The First Industrial Revolutions* (Oxford, 1989), pp. 25-43, esp. pp. 29-35, Tab. 1-2, Fig. 1. Id., *British Economic Growth 1760-1913: A Challenge for New Growth Theory* (University of Lancaster Discussion Papers in Economics, Lancaster, 1993); C. K. Harley, "British Industrialization Before 1841: Evidence of Slower Growth During the Industrial Revolution," *JEcH*, XLII (1982), pp. 267-289; J. Mokyr, "Accounting for the Industrial Revolution" in Floud & Johnson (eds.), *Cambridge Economic History,* Vol. I, pp. 1-27, Tab. 1.1-1.4.

8 Ch. 2, section 2.1

(4) Whilst it is not only valuable to view Scotland and England on separate terms, the following discussion will also suggest that England, one of the richest and by modern standards the "most developed" economy of her time, is in fact a sub-optimal benchmark for comparison. Scotland's commercial and economic trajectories are in fact best placed into a (north-western) European perspective. This comparative view can go a long way in terms of explaining observable historical phenomena. As historians of Scotland's eighteenth-century society and economy have not usually adopted this (northern) European perspective, the present work is intended to partly make good for this deficit.

The remaining sections of the present work will therefore seek to establish trade's role in the Scottish economy. They contain an examination of structural aspects that limited the growth potential of the Scottish economy and her gross total trade levels (6.1). This discussion will be carried out in a comparison, using the English evidence as a benchmark, as, notwithstanding the sub-optimality of England as a benchmark for comparison, there were some shared elements in terms of the fluctuations, economic administration and thus statistical recording. An analysis of the closeness of movement between overseas trade fluctuations and available index figures for domestic economic activity (6.2) will be followed by a section which places the results into a north-western European perspective excluding England (6.3). These points will be rounded up and concluded by sketching an explanation of the eighteenth century Scottish trade pattern (6.4).

One cautionary remark may be made by stating that the present chapter does not intend to take up the debate about the Union 1707 and its consequences for subsequent Scottish economic development in more than very general terms. It is rather intended to shift and add to the debate by directing attention to previously neglected aspects. A positive effect of the Union 1707 on eighteenth-century Scottish development cannot seriously be doubted. But what needs to be reviewed more critically is the weight of those sectors that have been identified as the growth sectors in eighteenth century Scotland, and which without the slightest doubt greatly benefited from the Union framework with a time lag of not more than three decades, after which the causal nexus between output growth and the 1707 context becomes unambiguously strong and positive: tobacco and linen. It will be proposed that in the

period under consideration neither the linen nor the tobacco trades, clearly Scotland's most dynamic sectors in the period,[9] managed to offset an unambiguously negative trend in per capita national income, as borne out by prices for essentials and nominal wages. In fact modern research has made it crystal-clear that the structure of the Scottish economy did not change significantly and an industrial transformation did not commence prior to 1760. This was the result chiefly of a largely sclerotic agrarian sector, which by its sheer size, in terms of incomes and employment, dominated Scotland's macro-economic performance and kept a firm ceiling on per capita income and total factor productivity growth rates.[10]

9 Devine, "Scotland"; "Modern Economy".
10 Ibid.

6.1 Scale and Scope, or: Did Size Matter?

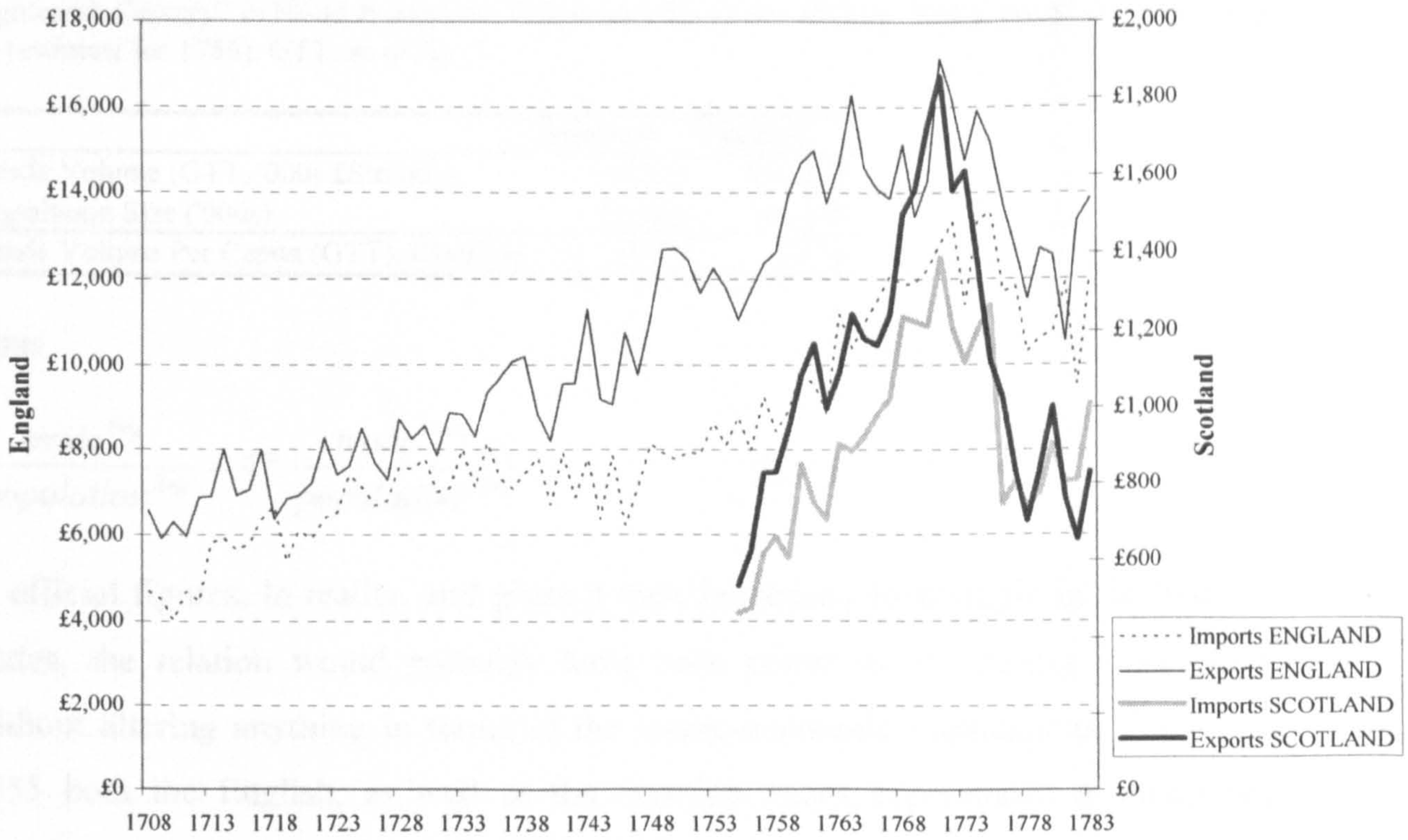
As discussed in chapter 4, the Scottish trade volume grew considerably, 1700-1760, but mainly after the mid-1730s. For the present discussion it is important that Scottish commercial fluctuations closely mirrored those known for England's foreign trades in the period (which, due to the availability of trade statistics since 1696 are somewhat better documented), and that therefore it might be tempting to speak of a "British" commercial trajectory after 1707.[11] It can be shown that in terms of structure, size and markets, however, Scotland's trade was different from the English pattern. Therefore speaking of "British"[12] overseas trade after 1707 is not a particularly helpful tool in the historical analysis.

11 In the long-run, Scotland's and England's overseas commerce tended to move in unison. This is borne out by a correlation coefficient of R= .81 for Scottish yields of *Old Subsidy* (a "mirror" of Scotland's trade volume, see ch. 2) and the English volume of trade over the entire period (£Sterling, 1708-1783).

12 W. Schlote, *Entwicklung und Strukturwandlungen des englischen Aussenhandels von 1700 bis zur Gegenwart* (Jena, 1938); Engl. Transl., *British Overseas Trade. From 1700 to the 1930s* (Oxford, 1952). Note that Schlote in the original correctly used the term "English", as opposed to the translator (W. O. Henderson), who uses the term "British" instead.

Figure 1: Scotland's and England's Overseas Trade Compared, 1708/1755-1783 (£Sterling)

Source: TNA, Customs 3, Customs 14.



The proposition is that, particularly in comparison to England, neither scale nor scope (structure of the trade volume) of Scotland's overseas trade in the period was developed sufficiently, in order for trade to represent a decisive input to economic growth.

Figure 1 implies that the Scottish volume of trade did not usually exceed about five to seven per cent of the corresponding English (and by ways of basic arithmetic British) figure. This would only change after 1760, and then only temporarily; the early 1770s, when levels of ten to eleven per cent (of the British totals) were reached, remained the exception. The resulting per capita trade differentials for Scotland and England were considerable. In the 1750s, the average Englishman handled three to four times as much trade (£Sterling) as his Scots counterpart.

Table 1: Per Capita Volume of Trade, Scotland and England Compared (1755)
Population: Scotland: J. G. Kyd (ed.), *Scottish Population Statistics including Webster's Analysis of Population 1755* (Edinburgh, 1952); England: E. A. Wrigley, "British Population During the 'Long' Eighteenth Century" in Floud & Johnson, *Cambridge Economic History,* Vol. I, pp. 57-95 Tab. 3.1, p. 64 (estimate for 1756). GTT: as in Fig. 1.

	Scotland	England
Trade Volume (GTT, '000s £Sterling)	£1,001	£19,838
Population Size ('000s)	£1,265	£6,149
Trade Volume Per Capita (GTT), £Sterling	£0.79	£3.23

Thus

$$\frac{trade^{Eng}}{population^{Eng}} = 4 * \frac{trade^{Scot}}{population^{Scot}} \qquad (1)$$

in official figures. In reality, and given a high propensity to smuggle in the Scottish trades, the relation would probably have been closer to 3:1 during most years, without altering anything in terms of the macro-economic implications.[13] Since in 1755 both the English, as well as the Scottish trades experienced a slump and likewise moved in unison throughout the century, it is quite plausible that the above equation generally applies for most years prior to 1760. Thus, the Scottish "propensity to trade" was decidedly lower than England's. By the same token this also suggests that the Scottish economy was less open than England.

Historians have suggested that exports might have reached about 15 per cent of "British" (factually English) GDP around 1750.[14] For Scotland this is a highly unrealistic scenario.[15]

13 R. C. Nash, "The English and Scottish Tobacco Trades in the Seventeenth and Eighteenth Centuries: Legal and Illegal Trade," *EcHR*, Second Series, XXXV (1982), pp. 354-372.

14 Estimates by Crafts, Deane & Cole and Crouzet summarized in C. L. Lee, *The British Economy Since 1700. A Macroeconomic Perspective* (Cambridge, 1986), p. 109, Tab. 6.1.

15 There are no national income estimates for eighteenth-century Scotland. All evidence has to be exclusively based on available export figures, parts of which are likewise speculative. Nevertheless, it seems reasonably clear that, unless one assumed entirely unrealistic levels of per capita income, total exports (54 per cent of which were re-exports on average) are unlikely to have exceeded a threshold of, say, 7 to 8 per cent of Scottish gross national product or "total economic activity" in any given year in the 1750s.

Table 2: Hypothetical Levels of Per Capita National Income under Differing Scenarios for Total Exports to GDP Ratios

Share of total exports in GNP (%)	Per capita GNP (£Sterling), incl. exports to England	Per capita GNP (£Sterling), excl. exports to England
10%	£7	£6
9%	£8	£7
8%	£9	£7
7%	£10	£9
6%	£12	£10
5%	£14	£12

Based on an average figure for total exports 1755-9 of £754,087 Sterling, adding a hypothetical total of £120,000 for "exports" to England. Population: 1,265,380 (1755).

English per capita GNP is thought to have been less than £10 in 1688; it could have stood at £12 to £14 (regardless whether real or current prices) in c.1760.[16] If it is accepted that Scottish per capita GNP could not have exceeded the English figure at any time, but would rather have been decidedly lower, the factual Scottish exports to GNP ratio would work out at between 5 and 8 per cent in 1755-59, one-half the English figures at best, regardless if only "overseas trade" is considered, or the English link is included. Domestic exports are unlikely to have exceeded about 2 to 4 per cent of Scotland's national income. *A priori* the index number problem would argue against a strong causal link between trade and (possible) economic growth.[17] But within an a priori small absolute and relative size of Scotland's overseas trade volume, there were some further, structural constraints to growth.

Notable differences between the Scottish and English trading patterns in the period are apparent. Tobacco and sugar, the Scottish staples, accounted for only nine per cent of total English exports. This was only partly due to a generally lower English re-exports to total exports ratio of about 30 per cent (29 per cent, 1700-1704; 37 per cent, 1772-4)[18] vis-à-vis the Scottish average of 54 per cent (1755-1759), which will be discussed further below. English overseas trade had much stronger roots in domestic output than Scottish commerce at that time. This is important for the present argument, since, if trade was to be seen as an "engine for growth",

16 L. A. Craig and D. Fisher, *The European Macroeconomy. Growth, Integration and Cycles 1500-1913* (Cheltenham - Northampton, 2000), p. 164, Tab. 7.6; p. 167, Tab. 7.8. Population figures from Wrigley, "Population," p. 64, Tab. 3.1;

17 Yet even for England the notion that trade was a decisive factor for economic expansion prior to 1800 has been rejected. Harley, "Trade".

18 See Table 1 in chapter 5.

domestic products, particularly manufactures, ought to produce enough output in order for them to show up as representative items on Scotland's export balance sheet. Neither was the case in Scotland. In England's case textiles accounted for a total of 46 per cent and manufactures for a total of 63 per cent of exports (including re-exports), as opposed to Scotland, for which the figures work out at 32 per cent for textiles, or 35 per cent for total "manufactures" (1755-59). By the same token, the share of manufactures within *domestic exports* was far smaller in Scotland's than in England's case.

Table 3: The Structure of the Scottish and English Export Volumes Compared, 1755/1759

Scotland: TNA, Custom 14; England: R. Davis, "English Foreign Trade, 1700-1774," *EcHR*, Second Series, XV (1962), pp. 285-303. Average figures for 1755-59 (Scotland) and 1752-4 (England).

	Scotland		England	
Re-exports	54%		30%	
Domestic Exports	46%		70%	
Of which Manufactured Items		*76%*		*90%*
Of which Primary / Non-Manufactured Goods		*24%*		*10%*

Iron and *leather* manufactures occupied a low weight in Scottish exports, with averages of about 3 and 4 per cent of domestic, and 1 and 2 per cent of total exports respectively (1755/9).[19] This is interesting, as the case for a strong causal relationship between (colonial) trade and economic growth has sometimes rested on the assumption of a strong association between the colonial trades and investment and output in the domestic textile, iron and tanning industries. In regional terms the link would have been strong.[20] But in macro-terms, i.e. if the aggregate "Scotland" is used, prior to the 1760s iron works, sugar refineries, tanneries and the like did not yet benefit from an export share of their output, which could be labelled "any more than marginal".

The preceding observations are partly confirmed by *export shares* for certain branches of Scotland's economic activity, as far as they can be (tentatively) established. For *coal* production, export-to-output ratios can be "guesstimated" using

19 Ibid.
20 A. Slaven, *The Development of the West of Scotland 1750-1960* (London, 1976), p. 25f.; Devine, "Colonial Trades".

Whatley's output estimates for the Scottish coal industry in the 1750s[21], in combination with export figures obtained from the inspector general's ledgers of imports and exports. This suggests an export-to-output ratio for the coal industry of not more than about two per cent for 1755-59.[22] The *salt* industry, which had continuously lost its export markets between 1700 and 1760, after the 1750s sold between 92 and 100 per cent of its output in the home market.[23] *Agriculture* at that time probably attained a similarly low export share. At the second export peak in the mid-1750s, Scottish grain exports stood at about one-nineteenth of the English figure. Thus, as was the case in overseas trade in general, in the mid-1750s, England appears to have exported between two and four times as much grain on a per capita basis as Scotland at any time.[24] As it has been suggested that English grain exports could have been no more than about eight per cent of total domestic cereal output at its most in the eighteenth century[25], the Scottish figure accordingly has to be looked for in the area of 2 per cent. Since agriculture was the largest branch of Scottish domestic economic activity and the major industrial branches seem to have enjoyed export shares hovering around two per cent of output in and about 1760, it seems fair to assume that about two per cent of Scottish output was exported from Scotland on average in 1760. Overall therefore, the Scottish domestic economy was neither export-driven nor particularly open.

There were two notable exceptions, which, however, are not immediately apparent from the overseas trade statistics, on which the discussion has been based so

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21 Revising earlier calculations made by Nef upwards, thus adding an upward bias to the estimated export share of the industry. C. A. Whatley, "New Light on Nef's Numbers: Coal Mining and the First Phase of Scottish Industrialisation, c. 1700-1830" in A. J. G. Cummings and T. M. Devine (eds.), *Industry, Business and Society in Scotland Since 1700* (Edinburgh, 1994), pp. 2-23, at p. 7.

22 This may be a lower-bound estimate, as the precise extent of the chalder in TNA, Customs 14 cannot be established. It has been assumed that 1 chalder = 1 metric ton, but according to Zupko (1985), the chalder for sea coal might have equalled 1.33 metric tons. R. E. Zupko, *A Dictionary of Weights and Measures for the British Isles: The Middle Ages to the Twentieth Century* (Philadelphia, 1985), p. 83f. But as Whatley's output estimates for the industry are upper-bound, these two biases probably cancel each other out.

23 C. A. Whatley, *The Scottish Salt Industry 1570-1850. An Economic and Social History* (Aberdeen, 1987), p. 50, Tab. 2.1.

24 Figures for England have been derived from D. Ormrod, *English Grain Exports and the Structure of Agrarian Capitalism 1700-1760* (Hull, 1985), p. 25, Fig. 1. A nine-year moving average has been calculated based on the figures contained in A. Bald, *The Farmer and Corn-Dealer's Assistant* (Edinburgh, 1780), pp. 437-442.

25 M. Overton, *Agricultural Revolution in England. The Transformation of the Agrarian Economy 1500-1850* (Cambridge, 1996), p. 88f.

far: *cattle* and *linen*. Due a definitional bias of the contemporary statistical material, these two commodities and their main foreign market – England – tend to be overlooked in most analyses of the eighteenth-century Scottish economy. This aspect is bound to distort the macro-picture in a serious way by affecting the scope and nature of the discussion of the commercial dynamics and their impact on economic growth. The cattle and linen trades appear to have expanded at rates matching or surpassing the growth rate of Scotland's *overseas* trades, 1700-1760. Their share in Scotland's total trade thus remained significantly high, probably even constant, throughout the period under consideration (chapters 4-5). In 1765 for instance, exports to England surpassed total domestic exports overseas by at least £115,000 Sterling. According to this calculation example in 1765 Scotland sent about three times as many domestic exports in value terms to England as to the American market.[26] England in fact remained Scotland's single-largest foreign market well into the 1760s. Thus, as late as 1760, more than three-fourths of total Scottish exports still went either to England, the rest of the British Isles or to Continental Europe and not to the Americas. The macro-economic implications are obvious, as the English market was based on those two production branches of the Scottish economy which in all likelihood enjoyed the highest export-to-output ratios of their time.

Linen enjoyed an average export-to-output ratio of 20 to 30 per cent.[27] A similar relation obtained for the share of linen manufactures in total Scottish exports *overseas*, c. 1760.[28] The possible export-to-output-ratio for *cattle* on the other hand is unknown, as is its factual share in total Scottish exports. Calculations made by the present author in chapters 4 and 5, however, have suggested a ratio of at least 13 per cent (cattle exports expressed in terms of hypothetical total foreign exports).[29] A European comparison has furthermore shown (chapter 4) that on a per capita basis Scotland compared favourably with two other major cattle exporters of her time, Denmark and Hungary.[30] These aspects might point towards a fairly high exports-to-output ratio, compared to those attained by other Scottish production branches.

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26 Ch. 5, section 5.2.2.
27 Approximated by Durie using evidence on Scots linen exports via Scottish *and* English ports. A. J. Durie, "The Markets for Scottish Linen, 1730-1775," *SHR*, LII, 1 (1973), pp. 30-49, at p. 38.
28 Ch. 5, Table 1.
29 Ch. 4 above, section 4.3.3; ch. 5, section 5.2.2, Tab. 24.
30 Ch. 4 above, section 4.1.1.1.

Therefore Scotland's traditional export economy, in terms of numbers, presumably not only experienced the highest growth rates, but also sustained and benefited from significantly high export ratios, either in terms of domestic output or their share in total Scottish exports, 1700-1760. In absolute terms they were much more important than exports of domestic products to the Americas or re-exports of American products to the European markets. It was the English and not the American connection which stimulated Scotland's economic development, 1700-1760.

Overall, however, primary and semi-processed products (grain, fish, including those half-processed goods originating in the extractive industries[31]) accounted for about 30 per cent of domestic exports overseas. As one important export commodity – cattle – is not covered by these figures (as these are derived from the *overseas* trade statistics), the true share of primary products exported from Scotland in c.1760 was probably closer to the value observed for 1704 (60 per cent) than to 30 per cent. A comparatively large share of primary or semi-processed goods – such as cattle, grain, lead (incl. ore) and fish – in domestic exports, will have a lower potential impact on national income growth than an export volume dominated by manufactured goods.[32] And those manufactures which were exported from Scotland predominantly – plain Scotch linen and coarse woollens – had a comparatively low value per unit. Thus the constraints to trade-led growth in 1760 were similar to those in 1700.

The same applies if *re-exports* are included in the discussion. Whilst the preceding remarks have illustrated some aspects of scope which accounted for a comparatively large share of low-value added products in Scottish domestic exports, it is important to bear in mind that domestic exports as such accounted for a comparatively low share in total Scottish exports overseas. Around 1760 (1755-1759, re-exports accounted for 54 per cent of Scotland's total exports overseas, as opposed

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31 Which could arguably be assigned to both the primary as well as the secondary sector of the economy.

32 As manufactures have a higher value-added component, gross barter terms of trade will in the long run move against a country whose domestic exports are dominated by primary products. And since the income elasticity of demand for primary products in world trade is lower than the income elasticity of demand for manufactured goods, demand for primary products tends to increase at a lower rate than demand for manufactured goods. A. P. Thirlwall, *Growth and Development. With Special Reference to Developing Economies* (Basingstoke - New York, 7th ed., 2003), p. 78f.

to England, where they accounted for about 30 per cent of total exports. Whilst scholars have convincingly pointed towards a general positive income effect of the carrying trade in colonial non-essentials[33], it can be shown with regard to the Scottish example that even on these grounds Scotland's overseas trade remained somewhat below full potential, even though the Union greatly increased the scope for legal trading. There were at least two constraints in the Scottish case: (1) with regard to trade as an "engine of growth", a carrier trade, dominated by re-shipping foreign commodities, will have mostly indirect impacts on domestic economic performance, as both the supply and demand for these goods are determined on foreign markets, bypassing the domestic economy of the carrying nation. (2) Scotland also represented a peculiar case, as not only did re-exports dominate total exports, but re-exports were also dominated by a single commodity, i.e. tobacco, which accounted for 80 per cent of total re-exports and therefore 42 per cent of total exports. Absence of portfolio diversification obviously made for a higher risk.

On the one hand, the tobacco, sugar and rice trades were by no means always or by definition profitable. Even though a mark-up of 100 per cent on American tobacco is usually assumed[34], it is important to bear in mind that apart from Britain, there were other suppliers of colonial re-exports to European markets as well, which accounted for a fair degree of price competition on continental markets. Furthermore, these markets were not always buoyant. The German market for tobacco for instance collapsed in 1760, with fall in the price quote for Virginia leaf tobacco in Hamburg in the order of 44 per cent between 1760 and 1763. Both could have (and often had) an adverse effect on profit levels; in fact there were times in the later 1750s when Scottish tobacco merchants just about broke even on cargoes of colonial foodstuffs sent to European ports. Thirdly, the re-export trades to Europe involved several currency exchanges, which influenced the level of profits, too. To the quite spectacular price fall for colonial tobacco on the German market, 1760-1763 for instance came a depreciation of the Hamburg currency against the £Sterling, which further reduced the profits (accounted for in £Sterling) on colonial tobacco sent to

33 Present chapter, n. 5, 6.

34 J. M. Price, *Capital and Credit in British Overseas Trade: The View from the Chesapeake 1700-1776* (Cambridge, Mass. - London, 1980), Appendix. Cf. TNA, Customs 14; valuation differential for re-exported / imported tobacco.

German destinations in the first half of the 1760s. As will be shown in a discussion on the German market for products traded through Scotland (chapter 8), some Glaswegian tobacco lords therefore recorded regular and straight losses on many occasions in and around 1760 on cargoes of colonial non-essentials (tobacco, sugar, coffee, and rice) re-exported to continental markets.[35] Whilst the absence of comprehensive business records for the period – with a few exceptions – does not permit a final statement as to *average* profits made on re-exports of colonial foodstuffs from Scottish ports in the 1750s, the Scottish trading portfolio, with a dominance of tobacco, accounting for up to 40 per cent of total Scottish imports and exports at times, at least in comparison to England, was limited in scope. Tied to one particular product, the risks were dependent upon one particular market which, as has been suggested (and will be shown below) was by no means constantly profitable.

The preceding comments therefore formulate the key constraints to growth, making the composition of the Scottish trade volume somewhat suboptimal for economic growth. This conclusion can be drawn quite regardless whether the English market is included or left out from a discussion of Scottish exports. Not only was the volume of English exports linked more firmly to domestic economic activity as such. It was also more firmly based on the export of manufactured, i.e. value-added items than Scotland's domestic exports at the end of the 1750s. The Scottish "warehouse economy" or "entrepôt trade" was not particularly favourable towards or required direct links between trade and domestic capital formation.[36] Accordingly Devine has convincingly shown that the majority of colonial merchants' investment projects did not pre-date the 1770s.[37] If the impact of the overseas and colonial trades on economic growth were marginal in the period under consideration on the grounds of structural observations regarding the trade volume, this proposition should also be largely borne out in a dynamic approach.

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35 Ch. 8, section 8.2.

36 R. H. Campbell, "The Industrial Revolution: A Revision Article," *SHR*, XLVI (1967), pp. 36-55, at p. 47. Cf. Id., "An Economic History of Scotland in the Eighteenth Century," *ScotJournPol Econ*, XI (1946), p. 18f.

37 Devine, "Colonial Trades," esp. pp. 3-11, Tab. 1-5.

6.2 Possible Trends in Economic Activity, 1700-1760

The aforementioned aspects would not suggest trade as a likely candidate for stimulating economic growth. In fact the following discussion will show that it is unlikely that there was significant per capita income growth in Scotland between 1700 and 1760 at all (but as there might have been *some* growth at times the question of whether trade fuelled growth does not become tautological). Due to the nature of the available sources, and the absence of national income estimates for eighteenth-century Scotland, the discussion will rely on proxies, charting the general trend in national income. These will be: (a) excise yields, (b) per capita consumption and net-exports of grain, (c) real wages, and (d) retained wine imports.

(a) Under the given social and macro-economic parameters for a pre-industrial and agrarian economy such as Scotland[38], *excise yield totals* (£Sterling), ideally deflated from purely fiscal effects (such as increases in the level or number of particular duties, charges, fines and forfeitures and other accounting items that did not directly relate to taxed output), might serve as a very crude proxy for fluctuations in total domestic output. This is chiefly because this tax, levied at the point of production, indirectly covers large branches of domestic agricultural activity, both pastoral and arable farming (mainly: beer, ale, spirits, malt, skins and hides). It also covers some branches of quasi-industrial activity, which, however, are mainly related to the processing of agricultural products, and thus indirectly link back into the economy's largest sector, agriculture.[39] If these branches represent the lion's share of domestic output, the long-term trend in total excise yields is unlikely to have diverged significantly from the long-term trend in total domestic output ("national income"). Only the usual restrictions, relating to any type of fiscal accounts, apply.[40]

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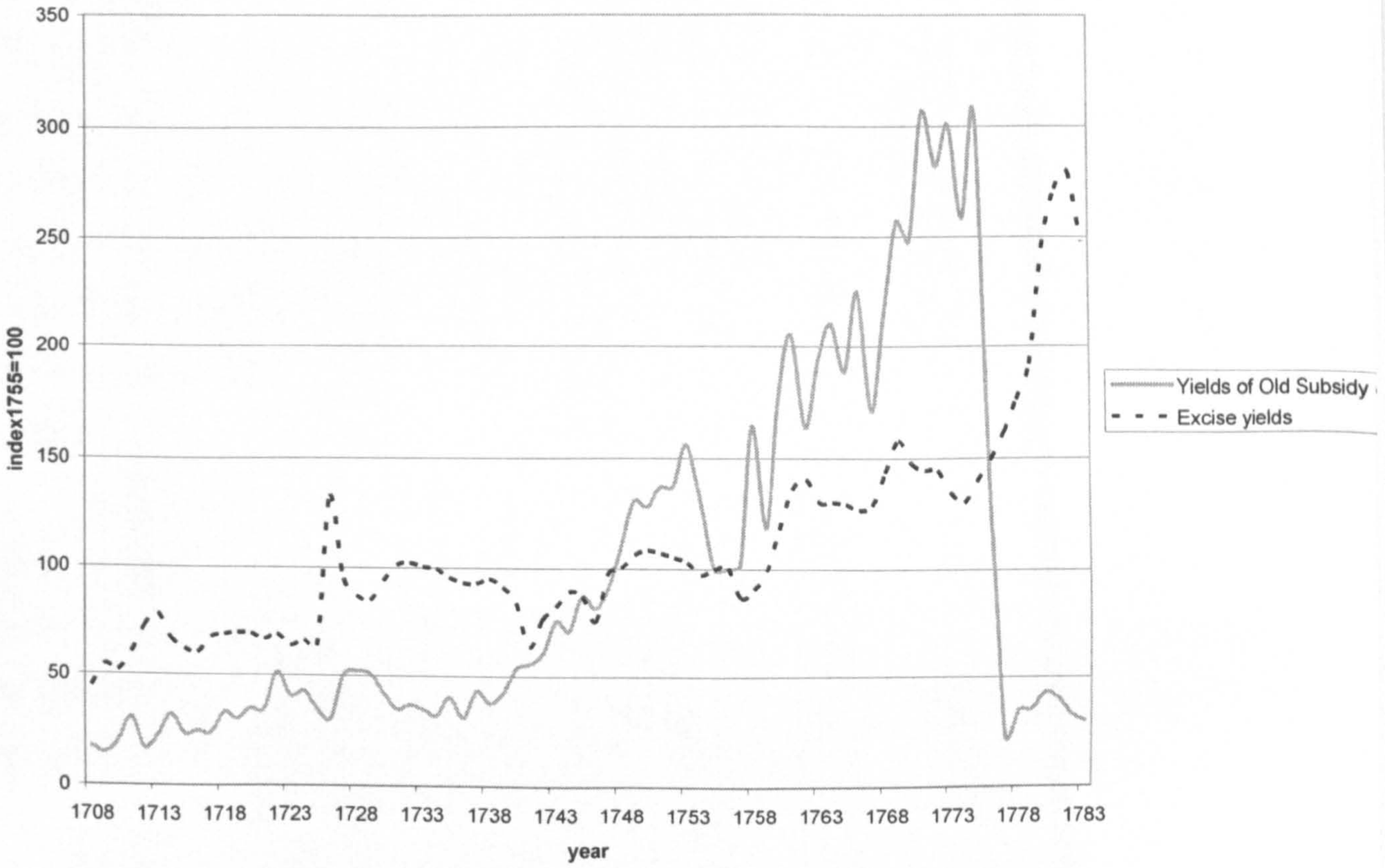
38 Appendix A 12. Devine, "Modern Economy," p. 14

39 For England see Deane & Cole, *British Economic Growth*, pp. 62-82; Crafts, *British Economic Growth*. For Scotland, no such index has as yet been constructed but excise figures have been used in I. Donnachie, *A History of the Brewing Industry in Scotland* (Edinburgh, 1979), p. 16, pp. 20-30.

40 Excise yields are biased in many ways. (a) Tax evasion was endemic, particularly during the first half of the eighteenth century. This would lead to under-recording of economic activity. (b) Not all branches of domestic production were taxed, and those that were, were not always representative of the (agricultural) economy. With regard to agricultural output, oats, probably by

Figure 2: Yields of Old Subsidy and Excise (Totals), 1708-1783

Old Subsidy: NAS, E501/1-72. Excise Yields: NAS, CE6/15, *Excise Yields Totals* (gross), E554/1 *Gross and Net Produce of Excise in Scotland, 1707-1770.*



far the most significant cereal, is not covered directly (but barley is via beer, ale and malt output). But as it is unreasonable to assume that the output of malt, barley, ale and beer would have expanded in times of a general contraction in total agricultural output and vice versa, a positive correlation between output of malt and the brewing and distilling industry on the one, and total agricultural output on the other hand (more directly the yields of barley) seems likely. Therefore, the excise series do provide some evidence on agricultural fluctuations, although the assumption of a one-to-one relationship between the two would be as critical as the dismissal of the excise series for the analysis. (c) Similarly to overseas taxation (customs), there was a continuous increase in the number of excise duties levied (and branches of production covered) throughout the eighteenth century. In Scotland at the time of Union, excise was levied only on ale, beer, wines and spirits. Duties on the following products were introduced subsequently: candles (1711); hops, hides, skins (1712); printed linen and calicoes, soap, paper, calicoes, mum, malt (1713); wrought silver plate (1721); coffee, tea & chocolate (1725); glass (1746); wheel carriages (1747); starch (1751). (d) The introduction of a duty and its systematic enforcement did not necessarily take place synchronously (the Malt Tax for example was apparently not levied until 1725, although accounts were kept for this duty since 1713). (e) Excise yields do not only cover domestic production, but imports as well, such as salt or imported alcoholic beverages that were further distilled within Scotland. (f) Some particularities relating to the accounting methods employed in the excise accounts render monetary totals only partly useful for an economic analysis. Excise yields for instance also incorporate interest on deferred payments (arrears), fines, licenses, and other balancing items relevant to their primary purpose of being revenue accounts. NAS, E554/1, *passim*.

From this it appears as though between 1708 and 1760, domestic output did not trend up significantly, especially as the increase in excise yields between 1708 and 1713 needs to be seen as purely fiscal.[41] The increase in 1725 is likewise due to a fiscal aspect, as it represents a fictive booking of Malt Tax yields that had accrued between 1713 and 1723 (but had not been charged), to the credit side of the excise yields accounts. Given that between 1700 and 1760 Scottish population grew moderately, it therefore seems unlikely that per capita agrarian product, covered by the proxies excise on beers, ales and malt, and by the same token, per capita national income, would have increased significantly between those two dates. In fact it is more likely that it stagnated or even – if a pessimistic interpretation of the sources is chosen – declined.

(b) This is supported by the evidence on *net-exports of grain* (discussed en detail in chapter 4) and recent research carried out on *per capita consumption of cereals*.[42] C. Douglas has estimated annual levels of per capita grain output and consumption in Scotland, 1550-1850, using the "demand equation" technique developed by Crafts et al., concluding that

> [i]n per capita terms, the agricultural sector was unable to keep pace with population growth after 1700. Output per capita declined steadily through the century, only stabilizing in the early nineteenth century. From about the middle of the eighteenth century onward, the Scots found it increasingly necessary to import grain from abroad.[43]

This ties in exactly and neatly with the evidence presented so far on stagnating ("positive scenario") or declining ("negative scenario") per capita national income levels in Scotland, 1700-1760. As Douglas' material has not been published yet, it will not be used for further discussion here, but the argument may be carried further using figures on net-exports of cereals (chapter 4).

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41 See previous note. Particularly the duty on hides and skins (1712) would have increased overall yields significantly.

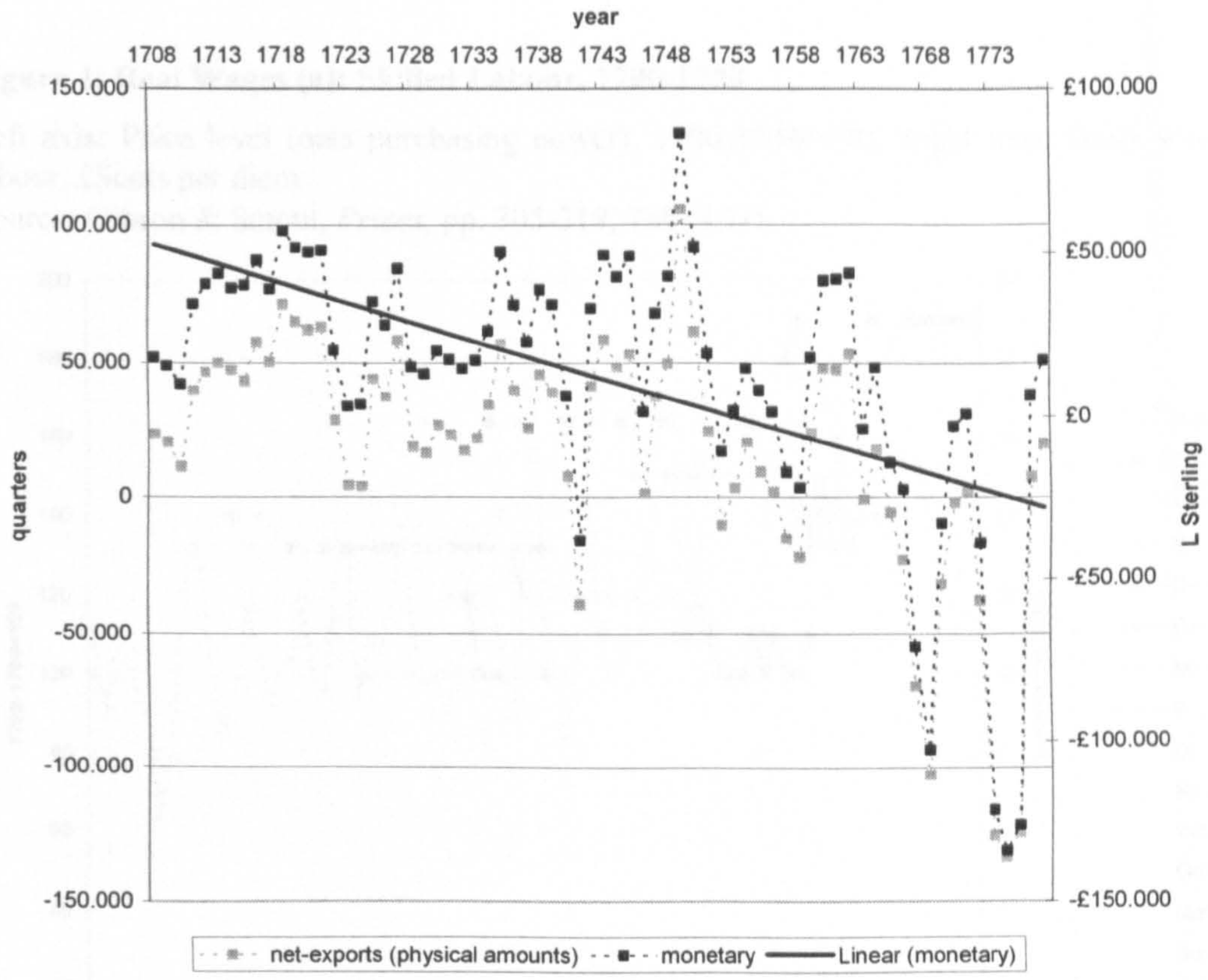
42 Ch. 4, section 4.3.2.3.2.2.

43 C. Douglas, "Enclosure and Agricultural Development in Scotland," paper given at the EHS Annual Conference (2004); p. 3f., especially data reproduced in graph 1 ibid. As these findings are the basis of a PhD thesis which has not been defended yet, the data cannot be reproduced here, but they essentially support the present argument.

Throughout the century, and from its early beginnings, as borne out by the linear long-term trend, there was a sustained long-term decline in net-exports of cereals from Scotland, reaching below zero from the 1750s on. Persistently negative levels of net-exports of cereals may be explained in "Rostovian" or Malthusian terms, but it is clear that Rostow's model (apart from the fact that it is generally outdated) is an unlikely fit for pre-industrial economies in a historical viewpoint.[44] A long-term decline or stagnation in per capita agricultural output was caused mainly by the rapid population increase after 1740, which was observable all across Europe. This caused export margins for cereals to decline and net-imports to increase to levels above zero on more and more occasions and for an increasing time span at each instance.

44 A short term decline and following recovery of grain (net) exports is Malthusian in most cases, as it is frequently observable after deficient harvests. The "Rostovian" model explains persistently negative net-exports of grain in terms of structural change towards "modern economic growth", i.e. growth of industrial and service sectors at the expense of agriculture in terms of incomes and employment. Then the country under consideration will specialize in non-agricultural goods, which, due to Ricardian comparative advantage and a greater income elasticity of demand enjoyed by manufactures than enjoyed by foodstuffs, can be more profitably sold in exchange for foodstuffs than by producing all food the country needs itself. This framework is clearly inapplicable for Western European economies prior to c.1800.

Figure 3: Scottish Net-exports of all Cereals (excl. Rice), 1708-1776.
Source: A. Bald, *The Farmer and Corn-Dealer's Assistant* (Edinburgh, 1780).



Admittedly, a shortfall of domestic cereal supply over demand, and accordingly an increase in inflation levels for grain prices (after 1740), do not have to be indicative of a decline in domestic *consumption* levels of cereal, as the shortfall might be partly or fully met, or even over-compensated for (then the population becomes better-off) by grain imports. The evidence on excise yields and real wages (see below), however, argues against an increase in disposable incomes in Scotland after 1740, suggesting a Malthusian constellation of food supply and demand, c. 1740-1760 instead. There apparently was a trend break in net-exports of grain in and around 1740. Grain prices and net-imports increased whilst wages remained largely stagnant. Real incomes in fact would have decreased rapidly after 1740, in line with the development in continental Europe.

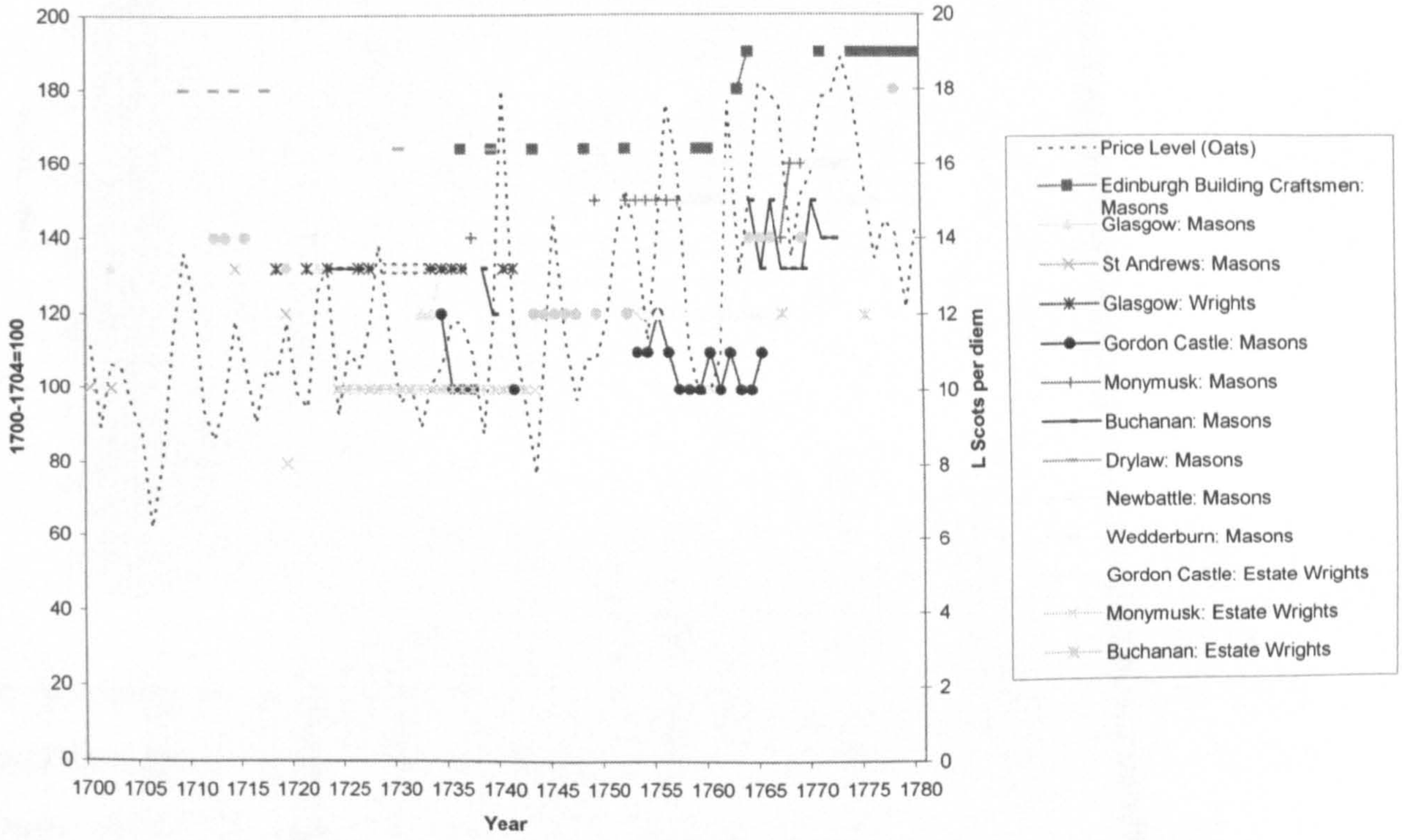
(c) *Real wages* can be approximated using the purchasing power of money wages in terms of Scotland's nutritional staple, oats.[45] "Real wages" may – within

45 Cf. W. Abel, *Agrarkrisen und Agrarkonjunktur in Mitteleuropa vom 13. bis zum 19. Jahrhundert* (Berlin, 1935), Engl. Transl. *Agricultural Fluctuations in Europe from the Thirteenth to the*

the given socio-economic framework – be expected to have moved in similar direction with per capita income over time.

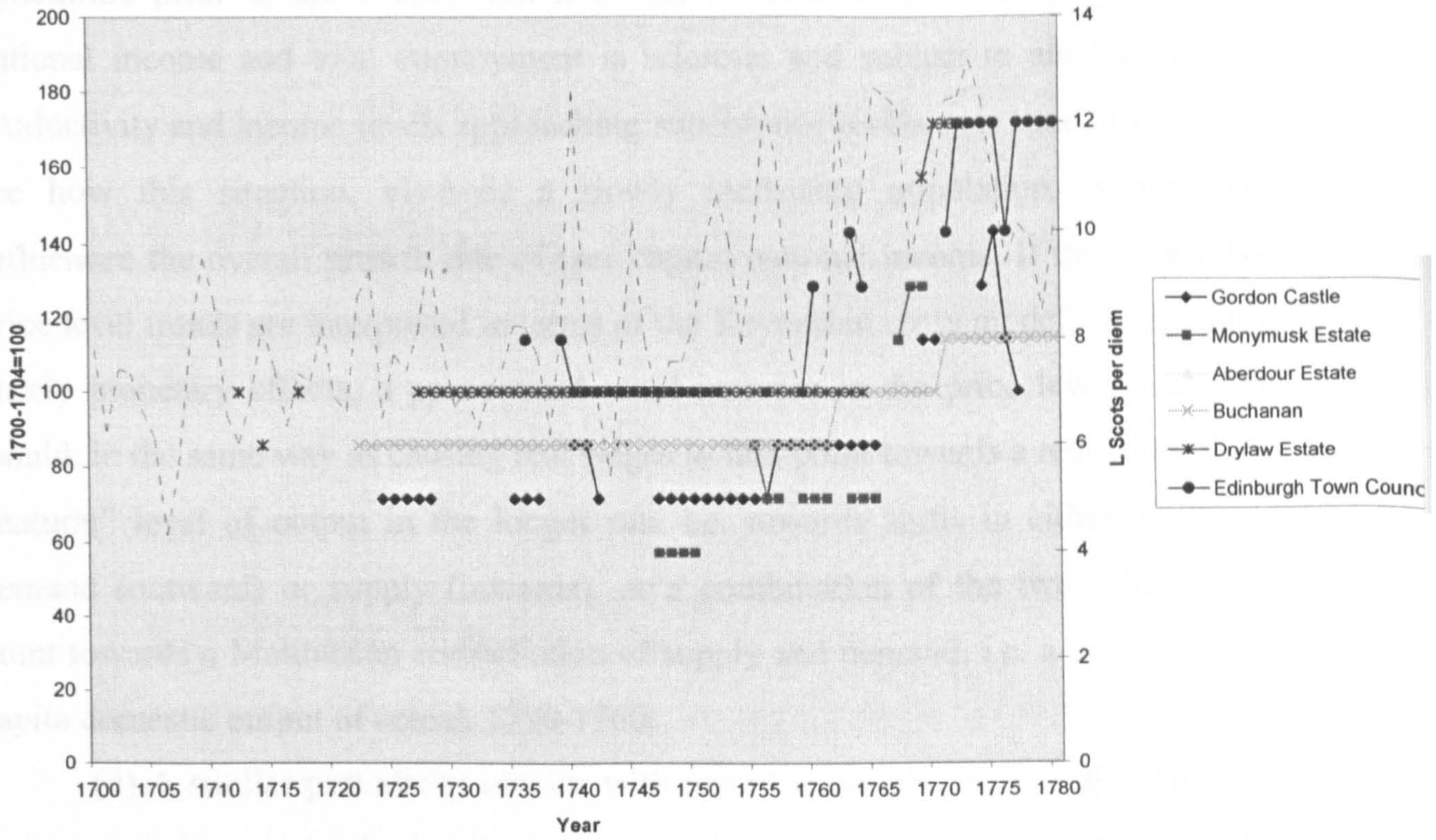
Figure 4: Real Wages (a): Skilled Labour, 1700-1780

Left axis: Price level (oats purchasing power), 1700-1704=100. Right axis: Daily wage for skilled labour, £Scots per diem.
Source: Gibson & Smout, *Prices*, pp. 305-319, Tab. 8.1-5.



Twentieth Centuries (London, 1980); Id. *Massenarmut und Hungerkrisen im vorindustriellen Deutschland* (Göttingen, 1971), pp. 16-29; P. K. O'Brien and C. Keyder, *Economic Growth in Britain and France 1780-1914. Two Paths to the Twentieth Century* (London, 1978), pp. 68-76. The same exercise could be made using wheat or barley prices, which, according to the examinable series, were liable to a movement that was similar or identical to oats prices. For Scotland, see: A. J. S. Gibson and T. C. Smout, *Prices, Food and Wages in Scotland 1550-1780* (Cambridge, 1995), Tab. 3.1-24 (pp. 84-129); Fig. 5.1-5.10 and discussion on pp. 162-184; pp. 337-364. P. H. Lindert, "Unequal Living Standards" in R. Floud and D. McCloskey (eds.), *The Economic History of Britain since 1700*, Vol. I. *1700-1860* (Cambridge, 2nd ed., 1994), pp. 357-386, p. 359f. H. J. Voth, "Living Standards and the Urban Environment" in Floud & Johnson, *Cambridge Economic History,* Vol. I, pp. 268-294.

Figure 5: Real Wages (b): Unskilled Labour
Left axis: Price level (oats purchasing power), 1700-1704=100. Right Axis: Daily wage for unskilled labour, Edinburgh Town Council and several estates, 1700-1780, £Scots per diem.
Source: as preceding graph.



In Scotland, the oats purchasing power of wages (real wages) for both skilled and unskilled labour was on the decline between 1700 and 1760. The decline became faster after 1740, again placing Scotland into a European economic trajectory. A pronounced fall in real wages after 1740, ending the "crisis of the seventeenth century", was in fact commonly observable in many European countries at the same time.[46] In this context, especially the series for *agricultural unskilled labour* are indicative, as "[i]n a country dominated by rural population, arithmetic rules out the possibility of substantial per capita increases that exclude the rural population."[47] If the preceding figures in any way form a small but representative sample of (the otherwise unknown) wage bill c.1700-1760, and similarly reflect the experiences of other members of comparable income classes, significant increases in per capita national income between 1700 and 1760 can be ruled out.[48] If furthermore Devine's

46 Abel, *Agrarkrisen*, passim. DeVries, *Age of Crisis*.
47 P. R. Gregory, *Before Command. An Economic History of Russia from Emancipation to the First Five-Year Plan* (Princeton, 1994), p. 49.
48 Bearing in mind all unquantifiable socio-economic parameters that could have offset the observable tendency in the above graphs, such as a certain degree of flexibility in the negotiable, non-monetary component of wages, which could be manipulated to circumvent labour statutes.

and Dodgshon's thorough studies on Scottish agriculture[49] are accurate, dynamics (towards commercialization and an increase in productivity) were limited in Scottish agriculture prior to the 1760s. And if a sector representing 70 to 80 per cent of national income and total employment is sclerotic and subject to almost stagnant productivity and income levels approaching subsistence levels over time, it is easy to see how this situation, vis-à-vis a slowly increasing population, would have influenced the overall growth rate of (per capita) national income. If the observable price level trends are interpreted in terms of the Keynesian cross model, disregarding purely monetary effects, a pronounced trend increase in the price level over time would, in the same way as causing real wages to fall, point towards a reduction of the "natural" level of output in the longer run, i.e. towards shifts in either aggregate demand (outward) or supply (inwards), or a combination of the two. This would point towards a Malthusian constellation of supply and demand, i.e. a decline in per capita domestic output of cereal, 1700-1760.

(d) A similar periodicity obtains with regard to an admittedly rather "exotic" economic index, retained wine imports per capita. *Retained wine imports* per capita equal per capita *consumption* of wine *per definitionem* for a country that does not produce the item.[50] In a very imaginative way, using some historical and sociological reasoning, per capita consumption of wine in the period and socio-economic framework under consideration can be expected to move in similar direction with other indices of macro-economic fluctuations, such as (per capita) national income.[51]

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49 T. M. Devine, *The Transformation of Rural Scotland. Social Change and the Agrarian Economy, 1660-1815* (Edinburgh, 1994); R. Dodgshon, *Land and Society in Early Scotland* (Oxford, 1981), ch. 7.

50 In the present discussion, re-exports have not been considered, in order to make the several series directly comparable (impost on wine and two different Treasury series: 1711-1731, 1752-1758). There were some re-exports of Spanish and Madeira wine to the Americas, but they did not affect the trend. Of the most important item of concern – Spanish wine – only 2 per cent of imports were re-exported on average.

51 Fluctuations in wine consumption could be indicative of changing economic fortunes of the middle and upper classes for the following reasons. A decline in wine imports could point to (a) a decline in per capita GDP or per capita consumption, (b) a decline in disposable income of its main consumers ("middle and upper ranks of society"), (c) a decline in numbers of members of the classes concerned in (b), either in absolute or in relative terms; (d) substitution by another product of similar utility. If possibility (d) is ruled out; options (b) and (c) are implicitly based on option (a), which is the most general and most illustrative explanation. The observable 1725 low of wine imports for instance coincided with an adverse macro-economic supply shock due to the failure of the 1723-4 harvest, which can be monitored from stark price rises, a 10 per cent decline in excise yields between 1721/2 to 1725/6, a 41 per cent decline in the Old Subsidy yields 1722-

As shown in chapter 4, Scottish per capita consumption levels of *wine* declined between 1710/30 and 1755/76.[52]

Table 4: Imports of Wine into Scotland, 1711-1731, 1755-1776

	Average imports p.a. (£Sterling)	Per capita (£Sterling)
1711-1731 (21 observations)	£19,387	£0.018
1755-1776 (20 observations)	£17,927	£0.014

Source: 1710-1730, 1752-1755: TNA, T36/13/3-4; 1755-1776: TNA, Customs 14; Data for 1763, 1769 missing. Figures contained in RH 2/4/548 have been valued at 1755 valuations (TNA, Customs 14). Figures contained in TNA, T36/13/4 for 1752-1758 do not distinguish between several types of wine and could thus not be valued. Population 1711-1731 assumed to have been 1.1 million, 1755-1776 1.265 million.

An absolute decline of 8 per cent in retained imports of wine between 1711/31 and 1755/76 might, based on entirely simplistic and speculative assumptions as to the development of total population in the same period, thus have worked out at a circa 20 per cent decline in domestic per capita consumption of wine.[53] Unless there was a switch of purpose of and preference for the item, which would fully explain the decline, this confirms the notion of a decline in Scottish living standards and per capita national income after 1730 or 1740.

Although definite conclusions as to the development in Scottish national income levels and economic growth need to be postponed, on the basis of the available excise, price and wage data, it seems unlikely that overall, between 1700 and 1760 Scottish per capita income levels increased. Overseas trade levels thus expanded within an overall largely stagnant economic environment. For certain periods a macro-economic depression, as well as a fall in per capita national income can be asserted on firm grounds. Excise yields for instance exhibit troughs in economic activity in 1723/5, 1738-41, in 1745/6, as well as towards the end of the

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1726, as well as contemporary reports on an economic crisis. Therefore, wine imports tended to follow the general trend in the business cycle. Slicher Van Bath for example attributed the decline in French wine output in the 1780s to the general fall in European real incomes; such a proposition can perhaps be held as a general one. B. H. Slicher Van Bath, *The Agrarian History of Western Europe, A.D. 500-1850* (London, 1963), p. 236

52 Over the entire period (1707-1783) the trend, approximated by the yield figures for the Impost on Wine, which, as the rate of duty remained constant, is a volumetric series, remained moderately negative in exact, and horizontal in generously rounded terms. The equation for the trend line (y = -1.524x + 7319,5) actually yields a (very low) negative coefficient. Ch. 4, section 4.3.2.2.

53 Population figures taken from C. H. Lee, "Economic Progress: Wealth and Poverty" in Devine, Lee & Peden (eds.), *Transformation*, pp. 128-156, at p. 130, Fig. 5.1.

1750s. These depressions[54] would have kept a ceiling on overall growth rates of per capita product and incomes. Obviously the characteristic timing of the "long eighteenth century overseas trade cycle" – identical to the tobacco imports cycle – did not overlap with the cycle of total excise yields.[55] Thus overseas commerce gained momentum within a largely stagnant economic environment.

This is not to deny, however, that trade acted as a considerable stimulus to economic growth on a *regional* level.[56] The concept of regionally imbalanced growth has been used in explaining not only post-1800 industrial transformation processes[57], but *inter alia* also differential processes of economic development prior to 1800, such as in eighteenth-century Russia[58], pre-modern Germany, c.1650-1800[59], or the Low Countries.[60] It might in fact explain parts of the Scottish pattern of trade and economic growth prior to the industrial revolution. Chapter 5 has worked out the dual pattern of Scotland's trade, roughly coinciding with a geographical pattern. If one considers that the West of Scotland handled about 60 per cent of gross total overseas trade, whilst accounting for a mere 14 per cent of the Scottish population (1755), it is at least possible to state that – regardless of *what* exactly was traded – in the West of Scotland commerce was more important than anywhere else. In this way it might have considerably stimulated some economic development *in this area* by a variety of multiplier effects and lateral, forward and backward linkages, arising from a proportionately higher demand for trade-related products and services in this area.

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54 See ch. 4, section 4.3.2.3.2.4.

55 Between 1708 and 1783 Excise yield totals and yields of "Customs" (a proxy for movements in the Scottish trade volume) are only weakly correlated, the correlation coefficient being R=+0.27. The customs yields statistics have been discussed in ch. 3, section 3.3 above.

56 Slaven, *West*, pp. 6-10, and ch.2.

57 S. Pollard, "Industrialization and the European Economy," *EcHR*, Second Series, XXVI (1973), pp. 636-648; Id., *Peaceful Conquest. The Industrialization of Europe 1760-1970* (Oxford, 1981). R. Fremdling, T. Pierenkemper & R. H. Tilly, "Regionale Differenzierung in Deutschland als Schwerpunkt wirtschaftshistorischer Forschung" in: R. Fremdling and R. H. Tilly (eds.), *Industrialisierung und Raum. Studien zur regionalen Differenzierung im Deutschland des 19. Jahrhunderts* (Stuttgart, 1979), pp. 9-26.

58 I. Blanchard, *'Russia's Age of Silver'. Precious Metal Production and Economic Growth in the Eighteenth Century* (London, 1989).

59 K.-H. Kaufhold, "Gewerbelandschaften in der frühen Neuzeit (1650-1800)" in: H. Pohl (ed.), *Gewerbe und Industrielandschaften vom Spätmittelalter bis ins 20. Jahrhundert* (Stuttgart, 1986), pp. 112-202.

60 J. Mokyr, "The Industrial Revolution in the Low Countries in the First Half of the Nineteenth Century: A Comparative Study", in: *EcHR*, Second Series, XXXII (1967); Id., *Industrialization in the Low Countries, 1795-1850* (New Haven - London, 1976); J. Riley, "The Dutch Economy after 1650: Decline or Growth?" *JEEcH*, XIII (1984), pp. 521-56.

Dynamic spin-offs might be imagined in the shape of an increased demand for construction (port facilities) work, services such as carrying, banking, insurance etc., manufactures and the like – it is no coincidence that Glaswegian tobacco lords increasingly resorted to centralized forms of production for obtaining items sent to the Americas such as rope works, tanneries, sugar refineries and the like, which were all located in the vicinity of Glasgow. In macro-economic terms, however, the quite spectacular "long eighteenth century overseas trade cycle" ran its course in a largely stagnant economic environment.[61] Obviously, the link between the overseas trades and their markets (supply: Americas, demand: continental Europe) and the domestic (Scottish) economy was weak. These trades, their mechanisms and patterns, worked quite independently from the domestic Scottish economy.

But whilst trade is unlikely to have *caused* intensive economic growth, it might – and is in fact likely to – have *accounted* for some growth (by its absolute growth in the order of 300 per cent between 1700 and 1760, chapter 4). A simple example might clarify the point. A dynamic sector ("overseas commerce") attaining 5 per cent of national income in net terms at the starting point (1700), whilst the rest of the economy remains stagnant, will cause national income to grow at an annual rate of 0.16 per cent over 60 years, if this dynamic sector increases its output by a factor of three over the same period. At the end of the period (1760), this sector will have increased its share by a factor of almost three (i.e. to 14 per cent of national income), whilst the rest (the "stagnant sectors") will now have a lower share of 86 (instead of 95) per cent in total income.[62] Although this example is entirely fictive, the following section will show that these dimensions are not entirely unrealistic for

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61 Devine, "Colonial Trades"; Slaven, *West*.

62 Assuming that the dynamic sector triples its output over 60 years. Then the average annual growth rate (r) will be $r = (\sqrt[m]{(\frac{X_N}{X_T})} - 1) \times 100$, with XN=national income at the end of the period under consideration (110); XT=national income, base year (100), m=60.

	"Stagnant Sector"	"Dynamic Sector"	"National Income"
1700	95	5	100
1760	95	15	110
1700	95%	5%	100%
1760	86%	14%	100%

eighteenth-century Scotland, especially if measured against contemporary European countries.

6.3 Trade and the Economy: The European Perspective

As has been shown in 6.1, Scotland's overseas trade levels were small, in comparison to England, or expressed as trade's share in total Scottish economic activity. It reflected differential stages of development prevailing throughout "Britain". In the *First Statistical Account of Scotland* (1791-2) it was for instance noted – with regard to the year 1763! – that

> [a] stranger coming to Edinburgh was obliged to put up at a dirty uncomfortable inn, or to remove to private lodgings [.]" and "[t]here was no such place as an Hotel; the word indeed was not known, or was only intelligible to persons acquainted with the French[.][63]

Furthermore, the *Scots Magazine* resolved in 1763 that

> [t]he free intercourse we have now with England, has already produced a remarkable effect upon us, by softening and humanizing our manners, and by disposing us more and more to the comforts of society.[64]

Even though impressionistic evidence should not be interpreted as indicative of average conditions per se, such colourful statements as to a "catching up" process (here: in terms of manners and perceptions of comfort) would not have been issued in print, if both countries had proceeded at a similar stage and pace of economic development and per capita income since 1700. Different levels of per capita income were *inter alia* reflected in different per capita trade levels and a different share of the agricultural to total population. But England is in fact not the best benchmark for a historical comparison. Measured against the most advanced economy of her time, with an exceptionally large per capita income and propensity to trade, any other European economy with the exception of the Netherlands, would have looked

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63 Sir John Sinclair (ed.), *The Statistical Account of Scotland* [...] (Edinburgh, 21 Vols., 1791-1799), Vol. VI (1792), p. 603.

64 *Scots Magazine*, XXV (1763), p. 363.

"under-developed" and "under-performing". Without doubt Scotland, in terms of real wages, per capita and disposable incomes, and her economic structure, was closer to the continental standard (Germany, Scandinavia, Russia) than to its immediate southern neighbour. Thus Scottish economic and commercial performance ought to be compared against her peers.

Notable similarities to the Scottish pattern, for instance in terms of the degree of openness, obtain for most northern European economies. In the 1770s and 1780s for instance, *Sweden's* foreign trade was marginal and "touched the lives of comparatively few of the country's inhabitants."[65] Gross total *Russian* trade accounted for no more than two per cent of *Russian* national income in the eighteenth century.[66] Further to the south-west, the share of exports did not usually exceed about five per cent of national income, either. Henning has estimated the exports-to-net-national-product-ratio at 4 to 5 per cent for *Prussia* in 1786.[67] This ratio is likely to have applied to the German Empire in general for this period. For Europe as a whole, Bairoch has estimated the ratio of exports to total GNP at less than 4 per cent prior to 1800. As these examples suggest, the degree of openness could vary considerably across Europe, presumably also reflecting different stages of development. But in general, at least in national income accounting terms, foreign trade remained a marginal phenomenon for most eighteenth-century economies. Scotland, with a ratio of domestic exports presumably not exceeding 4 per cent of national income in and around 1760, thus was in good company, and England, with an export share of up to 15 per cent in 1760, was clearly an outlier (and the first nation to industrialize). In purely arithmetic terms – as the English trade volume amounted to about twenty times the Scottish trade volume in c. 1755 – the English evidence may be formulated in "British" terms, i.e. by the statement that "Britain enjoyed an export share of 15 per cent of 'British' GNP in and around 1760." But the "British" generalization is an entirely useless historical tool, at least in terms of

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65 J. Rice, "Patterns of Swedish Foreign Trade in the Late Eighteenth Century," *Geografiska Annaler*, Series B, Human Geography, XLVII, 1 (1965), pp. 86-99, at p. 87.

66 Blanchard, *'Age of Silver'*, ch. 5, esp. Tab. 5.2, and p. 236f.

67 F.-W. Henning, *Das vorindustrielle Deutschland 800-1800* (Paderborn - Munich - Vienna - Zurich, 5th ed., 1994), p. 268f.

comparative economic history. Within "Britain" two decidedly different economic regimes prevailed.

A similar situation applies with regard to the share of manufactures in domestic or total exports. Again a Scottish share of 76 per cent of manufactures in domestic exports (see 6.2) was clearly lower than England's, but not a particularly bad achievement *per se*, if compared against Scotland's "peers". Towards the end of the century for instance, manufactures accounted for 70 per cent of *Prussian* exports, whilst the same ratio for *Bavaria* was only about 7 per cent.[68] England again needs to be seen as an outlier, and Scotland performed reasonably well, if average northern European conditions are chosen as the reference framework.

In some regards, however, there were elements of under-performance, even if Scotland is set within a north-western European panel that excludes England and the Netherlands. The Scottish *linen* industry has been named as Scotland's "leading" industrial sector, enjoying export shares in the order of 20 to 30 per cent, far in excess of what all other agricultural or industrial production branches achieved. It did so mainly after the 1730s, when Scottish linen production began to expand at exponential rates. This, however, was not particularly impressive *per se*. Linen was in fact the main branch of industry and the most dynamic sector in many eighteenth-century European nations. Linen exports of the major European producers – Silesia and other parts of the German Empire – expanded considerably after 1740, in the same way as the output of the Scottish and Irish industries.[69] About 76 per cent of Silesian linen production was exported in the middle of the century. Other German textile industries attained a similarly high export ratio.[70] Thus the Scottish linen record again follows a European trajectory, albeit with a record that remained below what *could* be achieved.

In the most general terms, regarding her economic structure and stage of economic development, eighteenth-century Scotland prior to 1760 also appears to

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68 P. Kriedte, "Trade" in S. Ogilvie (ed.), *Germany. A New Social and Economic History,* Vol. II. *1630-1800* (London - New York, 1996), pp. 100-133, at p. 112, Tab. 4.1., p. 115.

69 P. Kriedte, *Spätfeudalismus und Handelskapital. Grundlinien der europäischen Wirtschaftsgeschichte vom 16. bis zum Ausgang des 18. Jahrhunderts* (Göttingen, 1980); Engl. Translation, *Peasants, Landlords and Merchant Capitalists. Europe and the World Economy, 1500-1800* (Leamington Spa, 1983), p. 136f.

70 Kriedte, "Trade," p. 114.

have been close to the north-western European average. The urbanization degree and its reciprocal (share of agrarian population in total population), can be reasonably asserted for a variety of north-western European countries. In the absence of suitable economic statistics, the degree of urbanization may be taken as a very rough approximation of (i) the average share of non-agricultural population in total population (assuming that not too many of the towns were "ruralized"), as well as – on even more speculative grounds – (ii) the "expected" share of incomes yielded from economic activity in the secondary and tertiary sector in total national income. It thus provides some tentative evidence on a country's "stage of development", particularly within a panel of several nations. In Scotland the urbanization degree amounted to about 9 to 16 per cent (depending upon what historians define as "urban") in circa 1750.[71] Accordingly *at least* 80 per cent of the population in Scotland lived in the countryside. In this regard Scotland was perhaps "more developed" than Norway, where this figure worked out at between 80 to 90 per cent of total population between 1720 and 1800.[72] She stood on equal terms with Sweden, Finland, Denmark[73], the German Empire[74], and Flanders[75], which had about 75 to 80 per cent of their populations *employed* in agriculture around the middle of the eighteenth century. England and the Netherlands on the other hand again represented the exception from the rule in terms of an exceptionally low share of agrarian in total

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71 Suggestions of thresholds constituting an "urban" conglomerate vary. J. De Vries, *European Urbanization 1500-1800* (London, 1985) uses 10,000, whilst T. M. Devine, "Urbanisation" in Id. and R. Mitchison (eds.), *People and Society in Scotland,* Vol. I. *1760-1830* (Edinburgh, 1988), pp. 27-52, has suggested that 2,000 would be a better measure for early modern Scotland, given the peculiar socio-economic parameters. Whyte uses an even lower figure of 500: I. D. Whyte, "The Function and Social Structure of Scottish Burghs of Barony in the Seventeenth and Eighteenth Centuries" in A. Mączak and (T.) C. Smout (eds.), *Gründung und Bedeutung kleinerer Städte im nördlichen Europa der frühen Neuzeit* (Wiesbaden, 1991), pp. 11-30, *passim*, esp. at p. 15.

72 S. Dyrvik, A. B. Fossen, T. Grønlie, E. Hovland, H. Nordvik & S. Tveite (eds.), *Norsk Økonomisk Historie 1500-1970,* Vol. 1. *1500-1850* (Bergen - Oslo - Tromsø, 1979), p. 133, Tab. 29. R. Fladby, "Norwegen 1650-1850" in W. Fischer, J. A. Van Houtte, H. Kellenbenz, I. Mieck & F. Vittinghoff (eds.), *Handbuch der Europäischen Wirtschafts- und Sozialgeschichte,* Vol. 4. *Von der Mitte des 17. zur Mitte des 19. Jahrhunderts* (Stuttgart, 1993), pp. 298-310, at p. 303.

73 V. Dybdahl, "Dänemark 1650-1850" in Fischer, Van Houtte, Kellenbenz, Mieck & Vittinghoff. (eds.), *Handbuch*, Vol. 4, pp. 281-297, at p. 290.

74 K.-H. Kaufhold, "Deutschland 1650-1850" in Fischer, Van Houtte, Kellenbenz, Mieck & Vittinghoff. (eds.), *Handbuch*, Vol. 4, pp. 530-588, at p. 540.

75 J. A. Van Houtte, "Die Niederlande 1650-1850" in Fischer, Van Houtte, Kellenbenz, Mieck & Vittinghoff. (eds.), *Handbuch*, Vol. 4, pp. 311-363, at p. 324.

employment.[76] Within a north-western European panel (excluding England and Holland), Scotland therefore compared rather favourably.

If the preceding ratios are taken as a proxy for these countries' economic structure (or even stage of economic development), the limits of the economically achievable can be approximated using Maddison's national income estimates for several north-western European economies. From these figures the following growth rates have been calculated:

Table 5: Annual Average Growth Rates of Per Capita Incomes of European Economies, 1500-1800

Compound growth rates calculated from A. Maddison, *The World Economy: A Millennial Perspective* (Paris, 2001), p. 262

	1500-1820	1500-1700	1700-1820
"Britain" (~England)	0.27	0.28	0.26
Flanders	0.13	0.13	0.12
Denmark	0.17	0.17	0.17
Germany	0.14	0.14	0.14
France	0.14	0.11	0.18
The Netherlands	0.28	0.52	-0.12
Norway	0.17	0.17	0.17
Sweden	0.17	0.17	0.17
Western Europe	0.14	0.13	0.16

Scottish growth rates, particularly on the basis of what is known about the Scottish economy and society, 1700-1760, are likely to have been close to the Western European average. As the calculation example made above (at the end of 6.2) has shown, a dynamic sector accounting for 5 per cent of national income, which triples its output, the output of all other sectors remaining stagnant, will cause national product to grow at an annual rate of 0.16 per cent over sixty years. Coincidentally this rate corresponds to Maddison's figures for Western Europe (see Table 5), but it needs to be stated that both are entirely fictitious. Nevertheless they demonstrate the limits of the possible, as well as one of several possible growth trajectories in the pre-industrial period. In Scotland, as was the case nearly everywhere else on the

76 In England, this share might have been as low as 40 per cent as early as 1688, and in the Netherlands it stood at about 50 per cent in c. 1750. P. Mathias, "The Industrial Revolution: Concept and Reality" in Id. and J. A. Davis (eds.), *The First Industrial Revolutions* (Oxford, 1989), pp. 1-24, at p. 18, Tab. 3. Netherlands: Van Houtte, "Niederlande," p. 324. J. De Vries and A. Van Der Woude, *The First Modern Economy. Success, Failure, and Perseverance of the Dutch Economy, 1500-1815* (Cambridge, 1997), p. 195, p. 228, Tab. 6.5, p. 233, Tab. 6.

continent, the agrarian sector, by a low productivity and diminishing marginal returns, and a generally prevailing high number of small farmers, sub-tenant and labouring classes, kept a firm ceiling on overall growth rates. The humble growth rates exhibited by most European countries between 1700 and 1760, of output, total factor productivity, per capita national income etc., were roughly the same as the long-run rates for 1500-1800, i.e. the early modern period as a whole.[77]

Much further research is needed. But the present section has shown that placing Scotland into a north-western European panel, excluding England and the Netherlands, can significantly augment our understanding of Scotland's pre-industrial development, as well as the role trade played for the Scottish economy. This is not to break a lance for Scottish parochialism, but it is clear that an aggregate "British" view after 1707, favoured by many historians and economists[78], might not always or by necessity yield the most balanced of conclusions.

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77 J. L. Van Zanten, "Early Modern Economic Growth: A Survey of the European Economy, 1500-1800" in M. Prak (ed.), *Early Modern Capitalism. Economic and Social Change in Europe, 1400-1800* (London - New York, 2001), pp. 69-87.

78 See works referred to in n. 7 above.

6.4 Explaining the Scottish Trade Pattern, 1700-1760

Thus between 1700 and 1760 overseas trade did not have a large overall effect on Scottish economic performance. Overall, trade was a marginal phenomenon, expressed in a comparatively low ratio of exports to total national income, i.e. a low degree of "openness" (6.1). As has been shown above (6.2), the quite spectacular "long eighteenth century overseas trade cycle" in Scotland ran its course during times of macro-economic stagnation and short periods of depression. The "long eighteenth century cycle" (1736/8-1775), determined by tobacco (and sugar), received its impulses relating to timing, amplitude and oscillations from foreign markets. Trade was confined to a relatively limited range of economic actors. Overseas trade was furthermore dominated by the colonial link and biased towards the re-exportation of primary and unprocessed products. These trades in fact bypassed Scotland both in the short, as well as in the long run. They were neither dependent upon trends in the domestic business cycle, nor did they significantly influence its movements. The analysis in 6.1 has thus underlined the weaknesses of the Scottish export economy, in particular the dominance of the re-export trades, as well as a low share of manufactures in domestic exports. This, however, was no particularly Scottish phenomenon, but applied in some form to most other contemporary European economies as well (6.3). The bias towards tobacco, however, was a peculiarly Scottish phenomenon. The following, without claiming to be exhaustive, is intended to provide a sample of *explanations* for the emergence of this trade pattern.

As shown in section 6.1, the Scottish overseas export volume was dominated by re-exports of colonial non-essentials, chiefly North American tobacco. This structure of the export volume reflected back on the structure of Scotland's import volume, which was likewise dominated by tobacco, sugar, rice and some other commodities that were intended for re-export (chapter 5). This trading portfolio was clearly much less diversified than for instance the English (chapter 5).[79] The markets

79 See chapter 5, Table 1.

for some "cash-crops" crucial to pre-industrial commerce, such as spices or tea, chocolate and coffee, the latter of which rapidly gained in commercial significance in England's case throughout the eighteenth century, could or would not be tapped by Scots traders (apart from quantities that were traded illicitly). Partly these markets, such as the tea trades, continued to be officially restricted to personal membership, which, however, as has been shown above (chapter 4) did not necessarily prevent Scots from entry on their own terms. But some of the other trades that were legally open to the Scots after 1707, such as sugar and coffee, would not be touched upon significantly, either (with the exception of certain periods). Thus specializing in tobacco which was legally available to Scots after 1707, and in which after the 1720s they were regularly able to undercut their English rivals, was a strategy to enter this lucrative eighteenth century "world warehouse commerce" on their own terms. But it likewise limited their operational range.

The growth of the colonial trades and the long-run implications for Scottish economic development as such need not be explained further, as historians have drawn ample attention to the inclusion of Scots traders into the framework of the English Navigation Acts by the Union 1707, which allowed Scots merchants legal access to the fruits of the English commercial empire.[80] There are two aspects, however, which tend to be overlooked in the historical discussion about the institutional change in 1707. First, the impact of the Union by opening up the English market for two key products of the Scottish economy, stimulated trade and development to a degree that was possibly higher than the impact of the colonial trades on Scottish economic development. Secondly, the heavy bias of Scotland's *overseas* trade towards tobacco requires some explanation as well.

First, the abolition of customs duties on Scottish exports to England in 1707 and the creation of a common market proved fortuitous for Scottish economic development. Under the legislation established by the English restoration customs system (1660), which remained largely unaltered and applicable throughout the eighteenth century, cattle imported into England had until 1707 been liable to a duty of 7s 1d 2 farthings Sterling per head, or about 24 per cent of its *f.o.b.* value (at

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80 E.g. T. M. Devine, "The Union of 1707 and Scottish Development," *Scottish Economic and Social History*, V (1985), pp. 23-40; Id., *Scotland's Empire, 1600-1815* (London, 2003), ch. 4.

average prices for cattle, c.1700-1760). The same applies to Scotch linen. The economic impact of the Union 1707 becomes immediately obvious. Annual average figures for Scots cattle exported southwards increased rapidly after 1707, far beyond the average levels sustained in the later seventeenth century. As shown in chapters 4 and 5, the total value of cattle and linen sent to England in and around 1760 still dwarfed total domestic exports *overseas*. These exports to England probably amounted to at least twice the average level of total exports to the Americas, c.1760. They even exceeded total re-exports from Scottish ports (mostly to continental European destinations) by about £100,000 Sterling. Clearly the English link in numerical terms surpassed Scotland's colonial link. In this way the Union 1707, by waiving customs duties on Scotland's major export commodities, without doubt provided for an important stimulus in Scotland's long-term economic development, that was presumably even more decisive than the colonial link. One of the most famous contemporaries – and certainly an authority in this regard – was well aware of this. He remained unequivocal in stating that the cattle trades for instance had gained "the greatest [...] of all commercial advantages [...] which Scotland has derived from the union with England."[81] Thus, as has been worked out in chapters 4 and 5, monitoring the overseas trades alone and their possible implications on Scottish economic development on the basis of the available statistical material, misses a significant share of total Scottish exports, economic activity and growth inputs.

Secondly, it is suggested here that the *bias towards tobacco* (overseas trades) was a result of the new taxation framework in 1707 (chapter 2), in particular the draw-back and bonding scheme operated by the Customs, combined with a weak manufacturing base of the domestic economy. The possibility of drawing back up to 100 per cent of import duties paid upon re-export was, apart from tobacco, enjoyed by no other taxable commodity in the eighteenth century. It is this possibility, as well as the credit mechanism operated under the bonding scheme, which not only accounted for a particularly large mark-up on colonial tobacco re-exported from Scotland, but also abolished cash payments (partly), where they were either

81 Adam Smith, quoted in R. H. Campbell, *The Rise and Fall of Scottish Industry 1707-1939* (Glasgow, 1980), p. 11.

technically unnecessary (as sums paid were refundable later) or represented a considerable drain on the liquid reserves of the merchants involved (chapter 2, sections 2.2.2-3). The institutional framework of the English Restoration Customs system thus created an environment that was particularly favourable to the transit trades on a grand scale. It was furthermore fortuitous in an environment in which domestic production had not many attractive commodities to offer. As seen in the present chapter, Scotland's manufacturing base was weak; in comparison to England, manufactures accounted for a rather small share in domestic exports. Since the later Middle Ages Scotland's export account had been suffering from low total factor productivity levels prevailing in the Scottish economy. Accordingly exports had been dominated by products marked by comparatively low quality: wool in the middle ages, later on woollen cloth and since the seventeenth century and through to the eighteenth century exceedingly coarse linen.[82] Linen was the only manufactured product to be exported in significant quantities. Yet this was mainly achieved by the new institutional superstructure of 1707 and its protective measures (bounties on exports, tariffs on foreign linen imports), which kept the superior German items away from the British domestic market and prevented them from making large inroads into British colonial markets. Within this economic and institutional framework merchants were drawn to the most profitable commodities they could legally obtain. In the present case this was colonial foodstuffs, but chiefly tobacco, as sugar markets were difficult to capture, due to French competition, as were the European markets for rice and coffee, which were dominated by the English (with a few exceptions which will be discussed in chapters 7 and 8 below).

Thus, whilst the design of the Scottish trade pattern can partly be explained in terms of the domestic market and the institutional superstructure, a full explanation of the Scottish trading pattern also needs to direct attention to the *northern European context* (but mainly foreign demand). The prevailing low-level-stable-state economies of pre-modern Europe, marked by low average incomes and non-existing

82 H. Samsonowicz, "Engländer und Schotten in Danzig im Spätmittelalter. Zwei Formen der Handelstätigkeit" in K. Friedland and F. Irsigler (eds.), *Seehandel und Wirtschaftswege Nordeuropas im 17. und 18. Jahrhundert* (Ostfildern, 1981), pp. 48-58, esp. at pp. 51-54; M. Rorke, "English and Scottish Overseas Trade, 1300-1600," *EcHR*, Second Series, LIX, 2 (2006), pp. 265-288. Durie, "Markets"; Id., *The Scottish Linen Industry in the Eighteenth Century* (Edinburgh, 1979).

or small spending margins beyond subsistence for the majority of the population, in a vicious circle kept the propensity to trade and thus the possibility to dispose of surplus production abroad generally low. As population levels began to expand all across Europe after 1740, with real incomes falling, the possibility of marketing surpluses abroad would not have risen significantly beyond the population growth rates, unless the prices of the tradable goods were radically reduced.[83] The most likely candidate to achieve this, particularly in the absence of productivity changes in manufacturing, was colonial foodstuffs. There were several ways of implementing this; one was lowering the costs of shipping. Menard has demonstrated that during the eighteenth century British real freight rates on tobacco and rice declined progressively, in tobacco's case in the order of approximately 80 per cent between c. 1700 and 1775.[84] Without doubt this change on the supply side had its effects on the final price at which British traders were willing to offer their products to the European consumer. Real prices for tobacco (relative to victuals) declined, c. 1740-1770.[85] Tobacco (and sugar) therefore created their own markets to a certain extent, which might partly explain the exponential growth in re-exports by the colonial powers or carriers in eighteenth-century world trade (Scotland-England, France, the Netherlands, Denmark-Norway and Sweden) after 1740. From the Scottish viewpoint therefore, especially given the parameters of the domestic economy, the choice of trading tobacco – and not sugar, rice, coffee, ginger and the like – was thus a logical one (even though temporarily the tobacco market might well prove adverse to Scots traders and their profit opportunities during single years, as will be shown in chapter 8 below). The choice was not only logical from the geographical point of view – as

83 H. Kellenbenz, *Deutsche Wirtschaftsgeschichte*, Vol. I. *Von den Anfängen bis zum Ende des 18. Jahrhunderts* (Munich, 1977), p. 344; Id., "Der deutsche Außenhandel gegen Ausgang des 18. Jahrhunderts" in F. Lütge (ed.), *Die wirtschaftliche Situation in Deutschland und Österreich um die Wende vom 18. zum 19. Jahrhundert* (Stuttgart, 1964), pp. 4-60.

84 R. R. Menard, "Transport Costs and Long-Range Trade, 1300-1800: Was there a European 'Transport Revolution' in the Early Modern Era?" in J. D. Tracy (ed.), *The Political Economy of Merchant Empires* (New York, 1991), pp. 228-75. With regard to productivity gains in the Glasgow tobacco trades, see J. M. Price, "The Rise of Glasgow in the Chesapeake Tobacco Trade, 1707-1775," *WMQ*, II (1954), pp. 179-199.

85 H.-J. Gerhard and K.-H. Kaufhold (eds.), *Preise im Vor- und Frühindustriellen Deutschland. Nahrungsmittel – Getränke – Gewürze, Rohstoffe und Gewerbeprodukte* (Stuttgart, 2001).

the traditional explanations[86] would have it – but also and especially conditioned by the new taxation regime which was imposed upon Scottish trade in 1707.

This particular market structure will now be looked at in more detail. The German market for Scottish products will be examined. Admittedly, a focus on Scotland on the one and Germany (chiefly Hamburg and Bremen) on the other hand, does not capture a particularly large share of eighteenth-century world trade. The uniqueness of the source material on either side of the North Sea, however, in connection with firm evidence as to the fact that this partial trade flow under consideration followed generally prevailing macro-patterns and was thus firmly embedded in what can be called the eighteenth century Atlantic economy, suggest that one deals with a historically highly significant, yet largely unexplored body of evidence.

86 J. M. Price, "The Rise of Glasgow in the Chesapeake Tobacco Trade, 1707-1775," *WMQ*, II (1954), pp. 179-199; Id., "A Revolution of Scale in Overseas Trade: British Firms in the Chesapeake Trade, 1675-1775," *JEcH*, XLVII (1987), pp.1-43. T. M. Devine, *The Tobacco Lords. A Study of the Tobacco Merchants of Glasgow and their Trading Activities 1740-1790* (Edinburgh, 2nd ed., 1990), ch. 4. I. W. Stevenson, "Some Aspects of the Geography of the Clyde Tobacco Trade in the Eighteenth Century," *The Scottish Geographical Magazine*, LXXXIX (1973), pp. 19-35.